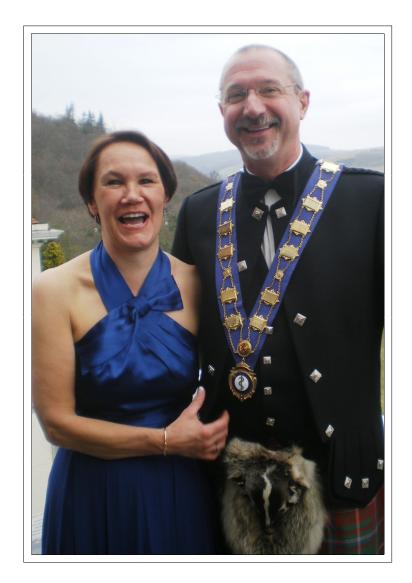
The Annals of The Scottish Society of Anaesthetists 2011



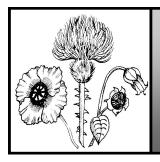


2011 Programme of events

May 13th Trainees Meeting at Crieff Hydro May 13th-15th Annual Spring Meeting at Crieff June 17th Annual Golf Outing at Forfar Golf Club November 17th-18th Annual Scientific Meeting Seamills Hydro

For details of contacts, meetings, events etc....

www.scottishsocietyofanaesthetists.co.uk





Council contacts:

President:

Jim Dougall, Glasgow

Vice President:

Paul Wilson, Ayrshire

Hon. Secretary

Elizabeth McGrady, Glasgow

Hon. Treasurer

Kerry Litchfield, Glasgow

Editor of the Annals

Colin Runcie, Glasgow

Trainee Reps

Sarah Cross, Vishal Uppal

Regional Reps

Aberdeen Central Donald MacLeod Judith Wilson Dundee Highland Ross Clarke Southeast Paul Nicholas Alistair Baxter West Lynn Newman Caroline Whymark

The society has copyright for material published in the annals. Please address all correspondence to the Editor

Printed by Fairprint Ltd, 2 Fulton Rd, Dundee

Editorial

Plus ça change, plus c'est la même chose - IMHO, one of the constant principles of the NHS since I became a doctor oh those many years ago. Perhaps, however, the next few years will see pressures which will actually result in changes of some magnitude. The most relevant pressures are the health care budget and trainee numbers. By the beginning of financial year 2013-14, NHS funding will fall by 20% in real terms from current levels. The influx of money we saw during 3 consecutive Labour governments will be reversed; in addition, money will be transferred from scheduled to non-scheduled care to preserve public access to emergency care. The NHS will drift back towards a cancer plus emergencies service, back towards the level of elective capacity that preceded Tony Blair's election as PM.

Preparing for change is tricky but one approach is to at least consider the worst outcomes. In that context, the following are possibilities:- elective operating falling by 20% and perhaps as much as 40%; a moratorium on consultant jobs, both new and replacement; the disappearance of EPA's, discretionary points and merit awards, at least temporarily; the passing of the concept of theatre efficiency (there's no point being able to do 5 hips in a day when you don't have the money for numbers 3 and 4, let alone number 5); a reduction in elective lists covered by consultant anaesthetists with a move towards emergency cover by way of evening sessions, weekend daytime trauma rotas, etc; a shift back towards centralisation of services, eg, fewer larger ICU's.

This is the area where the other significant pressure is most pertinent. Scotland has many small ICU's. As the number of anaesthetic trainees falls, service cover of ICU's will move from one of their main activities to pretty much their only activity. In the medium term, anaesthetic trainees will receive little *anaesthetic* training until their role in ICU cover can be taken over by trainees in a scheme organised by NES and the future College of Intensive Care. IMHO (and all of the above represent my personal opinions only), such a development should be accelerated.

The future is unclear and both the même chose and apocalypse options are very much in play. The likelihood is that the path to be taken will lie somewhere between the 2 but we are closer to the less good option than we have been at any time since the start of my career. On a more positive note, the next round of Westminister and Holyrood elections will presumably be preceded by an increase in NHS spending.

By way of final remarks, I would like to thank Liz and Kerry for their gigantic efforts in organising the Society's activities. My own efforts have paled by comparison. Likewise I am indebted to the Society Presidents who have contributed Messages and Addresses, and to other members of Council. A particular thank you goes to all those who have contributed regional reports, especially those who have persisted over the long haul. Have a good 2011.



President's Message



It was a great honour and privilege for me to follow John May. The Society prospered during his Presidency. While John is a modest man, his contribution to our Society is far from modest.

We continue to move on while hopefully retaining the best of those formulae which have served us well.

The "Peebles" weekend, the last in the current series, proved another resounding success and great fun. This is in large measure due to the organisational skills and meticulous preparation of your executive, Liz McGrady and Kerry Litchfield. The annual Trainees' Meeting was smoothly executed by Sarah Cross and Jenny Edwards on the Friday. It was an auspicious start. The number and quality of Trainees' posters continues to increase and mirrors the importance the Society places on their contribution. It would be good to see even more trainees stay for the whole weekend. They are supposed to be the ones with the stamina. On the Saturday the Keynote Lecture by Dr. Pamela Cupples and the Guest Lecture by Prof. John Kinsella were very well received. Once again the trainees excelled in the Oral Presentations, and in a strong field the Donald Campbell Quaich for the best oral presentation was won by Dr Alistair May. The first winner of the James MacGregor Imray Salver for the best poster was Dr. Craig Beattie. Mrs. Lucy Imray kindly came to make the inaugural presentation of this fine Salver.

It was a relief, if not a surprise, that the AGM embraced the proposed move of the Annual Meeting to Crieff Hydro, after 18 years at Peebles. I am sure our expectations are about to be fulfilled - for all the family. It should freshen and further enliven our unique blend of education and good fellowship commented on by Prof McGowan last year. The open forum was again lively, with presentations from Dr. John Colvin (RCoA) and Dr. Kathleen Ferguson (AAGBI), and it is an important opportunity for a two way exchange of views. The concerns of trainees for the future were a prominent issue. For further political critique, the written reports of the AAGBI Scottish Standing Committee and RCA Advisory Board in Scotland can be seen on the Society website. Liz McGrady attends meetings of both these committees to represent the Society's views.

A notable event last year was the invitation to represent the Scottish Society at the 50th Anniversary celebrations of the North East of Scotland Society of Anaesthetists, on May 28th in Stracathro. Following the educational meeting in the afternoon, Dr. Charles Allison (that's Charlie), their President, hosted an hearty and sociable dinner in the evening, where I offered a toast and congratulations on your behalf. It was a memorable occasion. At the Annual golf outing at Lanark in June, Dr. Runcie ran out worthy winner. Our outing must be one of the few which remains oversubscribed.

The Annual Scientific Meeting was again held jointly with the RCA. The two days in Edinburgh in November were in my view outstanding. The programme was entertaining, engaging and enlightening. Prof. Brian Toft gave an excellent Gillies Memorial Lecture. He offered the view that if we believe proposed changes to our working practices compromise patient safety, we should and must feel secure in resisting such pressures. In the interests of our patients, we should not allow further erosion of our Professional confidence - a timely reminder, well made in these austere days. The decision to hold the Dinner in The Scotch Whisky Heritage Centre was inspired. As the convivial evening wore on, the company were more and more inspired. The organisers, Drs. Alistair Baxter, Paul Nicholas and John Wilson (in alphabetical order) deserve our congratulations.

It was sad to hear of the death of Dr. Kenneth Grigor in May at the age of 95. He was a past President of this Society and an exceptional man.

The Society evolves, hopefully for the better. You can see the small incremental directional changes in dramatis personae, activities and venues. It is only the story so far.

As Paul Wilson seamlessly assumes the chain of office I wish him well along with the new executive. It remains for me to thank all of Council for their efforts and acknowledge that your retiring executive have been as good as it gets. Colin Runcie has produced excellent, innovative Annals, and Liz McGrady and Kerry Litchfield have made it all happen with seemingly effortless efficiency. Good job!

I look forward to seeing you in Crieff.





I hope to tell you a little about the rise, decline and revival of the GHB - The PIOB MHOR. I offer you a theme, with variations. And I hope to bring you into a more sympathetic relationship with your national musical instrument - with some threads interwoven with Anaesthesia.

Doctors have been well represented in the world of Piping. Prof Alex Haddow, a past Post-graduate Dean at G.U., wrote an important book on "The History and Structure of Ceol Mor". When the Queen was introduced to the dignitaries at the Centenary of the Royal Scottish Pipers Society, she commented that she had been unaware that it was a sub-committee of the BMA.

On July 19th in the year 64, a fire broke out near the Circus Maximus in Rome which raged for 6 days. And the story goes that from his villa on the Quirinal Hill, the Emperor Nero watched and played the fiddle - but that's impossible. It would be 1500 years before that instrument was invented. But Nero did play a common folk instrument, the TIBIA UTRICULARIUS - The Bagpipes.

Most of us already have a preconceived relation-

Presidential Address

Of Tibias, Fistulas, and Utricles

Jim Dougall 2010

ship with the bagpipe. It is as reviled as it is revered. The pipes and their music have been the subject of much reconstructed romantic mythology and creative memory. So some of the chronology is approximate and most so called facts must be prefaced with "as far as we know".

AMUSIA is more than the considerable pleasure I take in my own jokes. A more formal definition would be "A defective perception and processing of rhythm, melody or the emotional impact of music". When it comes to an appreciation of the GHB, many are gripped by a serious affliction which we might call GHB Dysmusia. This is far too prevalent, even in Scotland. Misconceptions arise from deficiencies in Knowledge, Skills or Attitudes. So while a complete cure for GHB Dysmusia cannot be effected in a single afternoon, let's take the first steps.

We have all met people who stumble somewhat embarrassed over the pronunciation or spelling of the word anaesthetist. And so it is with Piobaireachd. The Classical music of the GHB is CEOL MOR - The great Music, more usually referred to as PIOBAIREACHD. These are almost synonymous but Ceol does not derive from the same root as music or the muses. Ceol means a sound like the sound of birds. Until 200 years ago almost all pipe music was ceol mor as distinct from CEOL BEAG - the small or light music consisting mainly of marches and reels.

Piobaireachd is still considered the highest expression of bagpipe music, and there are 3 elements to the word. Breaking it down makes it easy to understand.

PIOB-A Pipe

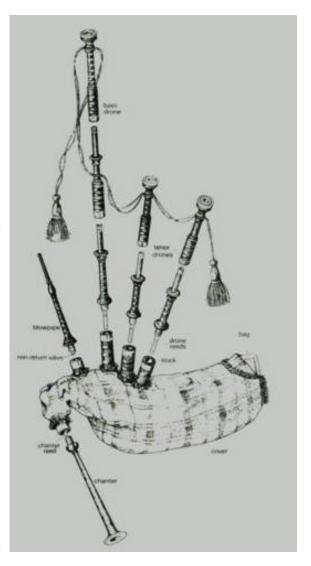
PIOBAIRE-A Piper

PIOBAIREACHD-What a Piper does with a pipe - piper's stuff i.e. the music.

It is important to understand that the Great Pipe and Piobiareachd developed together and were fashioned for each other. We will use these 3 elements as a skeleton to hang some information on.

First we have THE PIOB MHOR - the Great Pipe. Let's brush up on our anatomy - of a stand or set of bagpipes, not a pair please. The principle is quite simple with the gross anatomy as follows: as always we'll start with the airway. First the blowpipe. Air is blown into the bag. At the bottom of the blowpipe where it goes into the bag there is a non-return valve, originally a small flap of leather. This is technologically interesting because it is the earliest known use of a valve. It prevents backflow between breaths, allowing the RESERVOIR BAG to stay filled. The bag is often made with Goretex these days but many still think there is a place for the more traditional sheepskin or hide. 5 wooden female to male connectors are tied into the bag. These are called stocks. The blowpipe, chanter, and 3 drones are inserted into these stocks.

The Chanter is the pipe on which the melody is played. In Gaelic the pipes are said to be sung, hence chanter - Chanter to sing - the pipe that sings. The Chanter has 7 holes at the front and one thumb hole at the back. In addition we have 3 Drones - 2 small tenors, and 1 longer base Drone. These have sliding joints in the middle to allow tuning. The purpose of the drones is to provide a rudimentary harmony. Reeds are fitted to the chanter and to the drones - at the point they enter the bag. The Chanter Reed is a double reed similar to an oboe. It is made from arundo donax cane from Spain or the nearby Mediterranean, while the drone reeds are now often synthetic and are of a simpler single-tongued construction. The wooden parts are most popularly made of African blackwood. Cocus wood and ebony have also been popular, as have holly and laburnum.

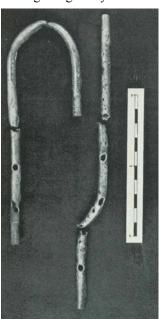


Pipes are decorated with metals, often precious, plus bone, horn, or ivory. The objective of the system is to supply a steady flow of air to the reeds by blowing and then, while taking a breath, maintaining the flow by squeezing the bag with the arm. This continuous flow means there is no loudness control on the pipe and gracenotes are used to emphasize rhythm and provide light & shade. Modern synthetic components, just like modern vapourisers, are less subject to the vagaries of temperature and pressure. Additionally there is often a collecting or absorbing device within the bag in order to minimise overhumidification.

And what of the **epidemiology**? Pipes are prevalent everywhere - ancient and ubiquitous - found from Lhasa to Langside, and beyond. They share with the drum and harp, the bell and rock gong, the claim to be the oldest of musical instruments.

But the bagpipe was not born into the world fully formed. So where did it come from? Let's consider some **embryology and comparative anatomy**. Flutes are like whistles while pipes use a reed. The terms are often used loosely and interchangeably. Bone flutes were found in Scara Brae in Orkney dated 2300 B.C. but recently a bone flute was found in Slovenia dating back to 40,000 B.C. In 1922 Leonard Wooley began the formal excavation of the birth place of Abraham, the ancient ruined city of Ur. During 12 years in the desert the most interesting artefact he found was item PG/333. In a private grave he found the genesis of the modern bagpipe.

The Silver Pipes of Ur are a proto-bagpipe still lacking a bag. They consist of 2 small silver tubes



with finger holes and are the earliest evidence we have for the bagpipe. They are some 5000 years old - the first definitive reed pipes. So now our musician is making progress - he has fitted reeds to his whistle. But why 2 pipes? The 2 pipes are not the same and when blown together give the impression of a drone behind the melody - so we see further progress. As anaesthetists we are

familiar with the concept of breathing round an external circle. Blowing a continuous tune required the difficult technique of circular breathing - a rather different concept. This involves using your cheeks and neck as a reservoir, and breathing in through your nose as you empty your

cheeks. This is not entirely without hazard, as we shall see.

As we travel forward through time we see prehistoric flutes, then Mesopotamian pipes. What next? Imagine a young shepherd finishing the last of the water or wine from his goatskin carrier (a bag or utricle if he was Roman). The beasts are at peace and after playing his simple pipe for a while his cheeks are weary with all this circular breathing.



A Slovakian herder.

He blows up his goatskin and attaches his pipe at the cork hole, squeezes the bag between his knees and eureka.... He has just taken the next leap forward in the evolution of the Bagpipe. His new modification will eventually allow him to play more comfortably, play for longer and in time use stronger louder reeds, and add drones. Exactly when and where the simple pipe became a bagpipe is difficult to say.

Fig 1 on page 7 shows an Alexandrian figurine of Roman origin. You can't see from this exactly how the bag is inflated, but a similar figure has revealed a 2nd person standing behind with a bellows - so this fellow is not a one man band - not quite yet. The addition of the bag to the reed pipe revolutionised its utility and it quickly spread north and west into Europe. It certainly developed



Fig 1

as an outdoor instrument, and has long been associated with shepherds.

Bagpipes were common in Europe from the 1200's. The precise timing of its arrival is contentious. A Roman legionary figure of a double pipe player was discovered near Falkirk and dated to AD 142. A stair lintel at Lethendy tower in Perthshire

dates to the 900's and shows a Clarsair i.e. a player of the Clarsach, and a triple piper.

Like a pebble dropped into a pond, the Bagpipe spread from the middle east. The time line is very approximately 1200 AD W.Europe >1300 Britain >1400 Scotland. So the bagpipe as a Generic form is *not* peculiarly Scottish and indeed may have been introduced here in relatively recent times. The earliest reference to bagpipes in English is in Chaucer's prologue to the Canterbury Tales 1386. Chaucer says of his Miller, "A Baggepype wel coude he blowe and sowne".



Chaucer's Miller

The Pig Piper from Melrose Abbey dating from the 1400's is the earliest bagpipe depiction Scotland. Let's look at the social context of the Bagpipe's arrival in Scotland and follow its subsequent journey. We have to suspend our modern geographical perspective and national boundaries. It was easier to travel by sea than by land. From Oban, Spain was more accessible than York, and areas on the western seaboard tended to develop closer cultural links. The Spanish Gaita is the nearest surviving relative of the GHB. The pipe was quickly absorbed into the prevailing Celtic culture of the West.



Spanish Gaita.

And England too had bagpipes, but because the instrument is in general biodegradable, no examples have survived. King Edward 1 of England wintered in Scotland in 1303-4. He intended to establish his claim to the Scottish throne, by subjecting the population to a little diplomacy and substantial military force. King Edward appointed John of Kinghorn to the post of FISTULARI REGIS. This meant he played one or all of, the Recorder, the Shawm - described as a form of fierce oboe - AND the Bagpipe.

Tradition has it that a few years later in 1314 "Hey Tutti Tatti", the tune to which Burns set "Scots wha hae", was played at Bannockburn. The tune was also taken to France by Scottish archers, and according to French records was played as Joan of Arc entered Orleans. So there is some evidence, albeit no hard evidence, for the bagpipes in Scotland before 1400.

James I Scotland [born 1394] is recorded as an expert player on several musical instruments including the bagpipe. Pipes were certainly in military use by the time of the catastrophic battle of Flodden in 1513, where there is a reference to "The Shrill Scots Pipes" on the battlefield. The Western seaboard had operated as sort of unofficial semi-autonomous state but the power and pretensions of the Lords of the Isles were in decline after Harlaw in 1411. However the Wild and Wooly West re-

mained remote, and retained its distinctive culture. Bards, who included Musicians, were highly esteemed and ranked above Drs. of Physic in the social order. Unfortunately from the period 1250 until 1500 not a single Scottish musical manuscript survives.

A number of famous piping Schools and dynasties grew up from around 1500 AD. The MacCrimmons on Skye were the most famous but there were others such as the MacArthurs and Rankines. These colleges schooled elite full-time pipers, offering "Higher Specialist training". They flourished under the patronage of highland chiefs who would send their already competent Pipers, and pay to have them "finished". No Chieftain was credible without a decent piper, who in turn enjoyed long-term employment. They would also buy pipes and banners and generally kit them out in grand style. Sometimes the banners were more expensive than the pipes. And you could buy a house for the cost of a set of pipes, and that included the cow. So Pipes were often shared.

The master teachers held land and privileges. This time was considered the high point of the tradition both in terms of composition and technique. They composed, developed and taught predominantly Piobaireachd. So while we are on the subject -What about Training? "To the make of a piper go seven years. At the end of his seven years one born to it will stand at the start of knowledge." It has been suggested you need 10,000 hours of practice to be good - that's good, not just core competent. As my piping guru Dugald MacNeil sayspractice slowly and often, slowly and often. He assures much can be achieved by mere "brutal and ignorant practice." Given the reduced time for training, and trainees from different specialties seeking airway skills, I believe we should make greater use of simple repetitive drills. I really feel it would help an increasing number of trainees who are frankly struggling to achieve basic competences.

Role models are important too. You hear folk talk reverently and fondly of their teachers. Billy Connolly said his career in folk music began when he saw Alex Campbell stride onto the stage. And Billy said to himself "I want to

be one of them". Pipers like to look the part. Even in these egalitarian days I don't think it does any harm for Doctors to do the same.

I have been told that learning the fingering on the practice chanter is 90% of the project and that learning to blow the pipe while important is only the remaining 10%. These days there are an increasing number of learning aids - music books, CD's, etc., but these do not replace the need for a teacher. In former days, Piobaireachd was transmitted almost entirely orally. Pupils would learn from singing and "off their teacher's fingers". Teaching, learning and memorising used a method of chanting called Canntaireachd (pron. can-cherach). This chant is simpler than you might expect, and is essentially an extended Doh Re Mi for pipers. There are various forms but the one most currently in use is called Nether Lorn Canntaireachd. These chants have been the butt of many jocular imitations - the old heedrum hodrum.

Let's leave training & return to our story. The years following the 1745 rebellion brought massive social change. A concerted attempt was made to eradicate the Celtic and impose a unified English culture. The wearing of tartan was proscribed. The pipes were brutally discouraged though not legally banned. Political power gravitated south and the sons of the chiefs were exclusively English educated. The chiefs had less money and less inclination to continue their previous patronage. Most of the famous piping colleges were extinct by the 1770's. Pipers no longer felt their art was valued and indeed had to find alternative gainful employment. Angus Cameron stated that Pipers could no longer be educated as the Chiefs were "A' deid, A' puir, and A' English." Throughout Europe increasing urbanisation marginalised rural instruments.

Gaspar's musette



For a period domesticated forms of pipe were popular in high society. Gaspar was a senior official in France. A well-heeled chap with a fancy Musette du Cours (see p.8) which is in the museum in Fort William. It belonged to Bonnie Prince Charlie, better known to us all as Prince Charles Edward ---- Louie Casamere Sylvester Severino Maria Stuart. Like most Royal families he had pan-European Italo-Polish-Franco-Irish-Scottish credentials.

All pipes have come close to extinction throughout Europe in the last 200 years. Many have not survived and the Highland bagpipe seems to have been in decline, short of requiring intensive care. The GHB survived for a number of reasons, and the relative importance of these remains the subject of debate. Factors may have included the relative isolation and persistence of an outdoor lifestyle in the Highlands. Piping received a renewed stimulus in the later part of the 1700's. Pipers were encouraged to join the newly raised Highland regiments - and aid recruiting into the bargain. The Army and Piping have been inextricably linked ever since.

The aristocratic Highland Societies of London and Scotland were formed in 1778 and 1784 respectively, in an attempt to preserve traditional arts. Competition was one important vehicle for this preservation and the Highland Society of London sponsored the first piping competition which was held in Falkirk in 1781. From around this time a romanticised view of the pastoral shepherd and noble savage reflected a desire to return to simpler classical times. King George IV came to Edinburgh in 1822 bedecked in Tartan. During the Highland Clearances sheep were deemed more profitable than people. As some estates were sold, sheep in turn gave way to sporting pursuits. It has been suggested that arriviste land owners would employ Pipers on a more casual, some would say decorative, basis. The status of Pipers fell, as they were expected to undertake other duties such as fishing, chauffeuring or gamekeeping. They were piper servants, not exclusively musicians.

Queen Victoria toured the Southern Highlands in1842 and was greeted by Celticised guards of honour complete with swords, battleaxes, and targes. She was much impressed by the lavish show put on by the fabulously wealthy Marquis of Breadalbane at Taymouth Castle, where John Ban MacKenzie (1796-1864) was first piper. She wanted a piper of her own and the story goes that she offered the post to Mackenzie, who declined. The Queen is reported to have further enquired of him "Where then shall I find a piper so skilful and so handsome?". John Ban is said to have replied, "Madam, I fear that you will fail - on both counts."

Angus MacKay, an iconic figure in Piping history

and born in Raasay. was appointed as Queen Victoria's first piper on 25th July 1843. From the 1860's Highland games proliferated, encouraged by the spread of the Railways and this encouraged competitive practice of

the



John MacKenzie

John MacDougall Gillies became first piper (first in seniority) to the Marquis of Breadalbane at Taymouth Castle in 1886. In 1888 Lady B returned to Taymouth from her Park Lane residence. She was not in the best of moods having lost £72,000 on the turn of a card the previous night. She sent for the factor and ordered the the pipers to sweep the drive. MacDougall Gillies fetched his pipes, packed his bags and left. Lady Breadalbane later secured her place in history, becoming the first person ever to lose £1M in a single night at the tables in Monte Carlo.

So as a "service specialty" the status and fortunes

of pipers have been subject to fluctuations. The moral of these stories is

- :- identify and be confident in your core skills
- :- job plan to maintain and defend high professional standards.

A further development came in 1903 with the foundation of The Piobaireachd Society. It has attempted to collect, preserve and promote the history, manuscripts and performance of Ceol Mor. It also underwrote the Army School of Piping at Edinburgh Castle.

What of the MUSIC? There were said to be 3 different types.

JOYOUS MUSIC - for dancing / merrymaking / feasting / drinking.

NOYOUS MUSIC - Music in times of sadness & unhappiness / laments.

SLEEP MUSIC - Lullabies to encourage sleep.

In most people's minds the Bagpipe conjures up an image of the Pipe Band. This entity as we know it today only replaced Fifes and drums in the military about 150 years ago. The first well documented Civilian band was the Govan Police Pipe Band formed as recently as 1883. For over 100 years the Boy's Brigade encouraged piping and in the 1930's there were more than 100 B.B. pipe bands in Greater Glasgow alone. This is rather ironic as the post-Reformation Church was not always so supportive of secular music.

Piobaireachd is defined in Grove's Dictionary of Music as: "A series of variations for the bagpipe founded on a theme called the URLAR or ground. The variations, generally 3 or 4 increase in difficulty and speed, concluding with a creanluidh or quick movement". This is an over-simplification. The structure is reminiscent of a RONDO. These Tunes, at times long and complex, always return to the ground. This reflects the circular nature of Celtic art. Piobaireachd is a unique form to Scotland and does not exist in the Irish Tradition. Tunes imbued with varying messages and emotional colour fall into groups that include Salutes; Gatherings; Warnings; and Battle tunes. There are also work tunes, and rowing tunes. The Piobaireachd is hypnotic and bradycardic, its slow tempo suited to Galleys or Birlinn's rowing to war

with a piper at the prow.

Aside from the technical demands on the musician Ceol Mor, like Classical music of the Western European tradition, makes greater demands on the listener. It has been said that Piobaireachd stands in the same relation to some lighter pipe music as Beethoven's 5th does to "She'll be coming round the mountain" - and "The lament for the Children" has been hailed as the finest single line melody in European music.

The Highlanders did not invent the Bagpipe but made 3 characteristic modifications. 1st - the pitch of the chanter was lowered and then the bore made more conical to make it louder. 2nd - they raised the drones to the shoulder so that the piper could walk about, and still have a dirk to hand if required. 3rd - they adjusted the intervals between the notes.

Probably from about the age of 5, you have come to accept the even-tempered scale of the Western European tradition as sounding "musical" and pleasing. This is learned behaviour and not universal. All cultures recognise the octave, low doh to high doh. At school we learned to divide the octave into seven steps or intervals, Doh re mi etc. The pipe scale represents an alternative way of dividing the octave. Why is this so? The answer lies in the inextricable link between the Music and the Instrument which evolved in order to play it. The notes in the bagpipe scale evolved in order that the instrument can play in 3 different keys - the pentatonic scales of G, A, and D. Donnington talks of "Highland Pipes with their wonderful barbarous power and uncanny intervals...". We CAN retune our ears, and recalibrate our appreciation.

Enough of Acoustics - Welcome to **Pathology**. Just before you rush out to buy a chanter, it is only fair that I alert you to hazards lying in wait for the unwary. SPSP does not stand for the Scottish Patient Safety Programme. NO - it's The Scottish Piper's Safety Profile. No profile is more dangerous than that of a piper in wartime. It has been said that the pipes have never yet spoken of defeat and their success in motivating troops is evidenced by the priority enemies give to silencing the pipers. In the Great War, 1 in every 150 Scottish sol-



diers who died was a piper.

Again starting with the **Upper Airway**. Distention of the neck and cheeks has been known since antiquity, particularly associated with circular breathing. This was known as the disfigurement of Athenae and the ancients would wear a leather strap to protect the face, a Capistrum in Rome or a Phoerbia in Greece. In the respiratory system reduced pulmonary function has been described. This is probably not significant and data is minimal. The cause, presumed barotrauma, is uncertain. It runs contrary to the popular belief among pipers that playing is good for their lung function. Symptomatic improvement however is reported in young asthmatic pipers. In the cardiovascular system a number of serious but fortunately extremely rare conditions are described - arrythmias, carotid dissection, spontaneous epidural haematoma, TIA's from patent foramen ovale. All of these are presumably associated with steep rises in intra-thoracic pressure.

In the gastro-intestinal system there is a mere suggestion of exacerbating diverticulitis & the pipes have been blamed for hernias. Soft tissue problems include strains and overuse syndromes such as tenosynovitis. Contact dermatitis has also been described related to nickel, cane wood and varnishes. Dupuytren's Contracture has been the end of many a piping career, as has carpal tunnel syndrome. CNS - some of the most debilitating conditions are neurological. The inaccurately named Piper's palsy is a focal dystonia causing loss of coordination, and control of rapid accurate movements. This is thought to be due to overplasticity in the motor cortex. The edges of distinct cortical areas of motor control begin to blur and overlap. Dystonia can be very refractory to Rx. It is not nerves and neither practice nor B-blockers help. It was known as the curse of APOLLO. **Deafness and tinnitus** are a concern. Health and safety regulations suggest 80Db as the noise level above which ear protection should be worn. Chanters have been recorded at 121Db which is no worse than being close to a grand piano played percussively.

Are there possible MICROBIOLOGICAL HAZ-ARDS? In order to keep animal bags airtight around stitching, various mixtures that might include glycerin, honey, whisky, would be poured and rubbed into the bag - this is called seasoning. This allegedly provided a perfect breeding ground for spores and bacteria. In a paper in the Lancet, the bag was blamed for a cryptococcal lung infection in an Australian piper. The Editor at the time rebutted the suggestion; he wrote "It's perfectly clear to me what's happened here. The piper developed a cryptococcal chest infection.... and he gave it to the bag."

The Future

The Strength of piping today owes much to the College of Piping in Glasgow. The College promotes teaching at home and abroad, spreading the music as did the military in the days of Empire. The National Piping Centre in conjunction with the RSAMD has recently introduced both an undergraduate and more recently a PhD qualification. This reflects a new confidence, and a welcome and timely legitimacy to a tradition which has been long neglected, or actively discouraged in the formal education system. The Scottish diaspora has always staunchly nurtured its traditions, but recently throughout Europe we have seen a resurgence in interest and enthusiasm for a variety of indigenous pipes, and a renewed appreciation of music accompanied by the drone.

TO CONCLUDE

The GHB is now an old variation on an even more ancient theme, but this doesn't diminish its current status as the pre-eminent and most clearly recognised pipe in the world. Indeed it is iconic of our country. It is a Great instrument, a glorious instrument. I am proud to be your President, I am proud to be an anaesthetist, and in the title of the famous Piobaireachd, "I AM PROUD TO PLAY A PIPE".

Gillies Lecture

Nobody's perfect

Professor Brian Toft OBE 2010



Every day, people make scores of decisions, each person trusting that they have made the most appropriate ones. Unfortunately, there are powerful hidden psychological, physiological and social processes that can affect individuals which, if not recognised and managed effectively, can increase the risk of inappropriate decisions being made. Some of these potentially dysfunctional mechanisms which were discussed in the lecture are noted below.

A person or a group of people may make inappropriate decisions because they:

- Hold an erroneous perception about the situation facing them.
- Excessively sanitise the world of hazards and therefore unintentionally fail to recognise the significance of warning signals.
- Experience 'cognitive dissonance' and change their view regarding a hazard-ous situation even though their perception (as revealed by hindsight) was correct.
- Fail to take cognizance of a potential hazard when warned of it by members of staff who are junior to themselves.
- Do not recognise that fatigue is affecting their judgement.
- Experience a level of arousal that is not optimum and inadvertently miss important situational cues.

Explicit attempts to remove or ameliorate the effects of the mechanisms noted above should help to reduce the risk of inappropriate decisions being made.

Case study

Four young patients were admitted to a Day Case Department (DCD) to undergo diagnostic tests. As young children do not tolerate invasive procedures very well when awake they were to be carried out under general anaesthesia.

One of the medicines to be administered to the children was the anticoagulant medicine heparin, at a concentration of 10 International Units per millilitre in 5ml. However, due to inadvertent human error and system failure the Consultant Paediatric Anaesthetist (CPA), who had over 30 years experience, inadvertently administered 5,000 International Units of heparin per millilitre in 5ml to each child, i.e. a concentration 500 times greater than he had intended. It should be noted however that the ampoules containing the two widely disparate strengths of heparin were almost identical apart from the actual text on the labels.

Fortunately, none of the four children appear to have suffered a grave sequela as a result of their heparin overdose. Nevertheless, the seriousness of these four patient safety incidents cannot be overstated.

Aetiology of the patient safety incidents

The external investigation determined that the causes underlying the four patient safety incidents (PSI) were as follows:

The security status of the Controlled Drugs Cabinet (CDC) in the DCD appeared to have been cognitively down graded from high security to a safe place to keep things including rings and mobile phones. Thus, an unconscious state of complacency seems to have been created by many of those who accessed the CDC. This, it can be argued, was part of the reason why ampoules containing 25,000 International Units of Heparin in 5ml were allowed to be stored in the CDC with the

CPA's medicines rather than in a separate cabinet.

The CPA was not aware that the ampoules containing the high strength heparin were stored in the CDC. Therefore there was no way he could have known that the patient safety incidents he was about to be involved in were at all possible. In addition, he had seen ampoules containing the weak concentration of heparin that he intended to administer unboxed in the CDC on previous occasions.

On the morning of the four patient safety incidents, his operating list had overrun and the CPA arrived at the Department concerned in a bit of a rush (elevated arousal levels) and also having had no breaks (fatigued). He had also been given some distressing news that morning hence also a little distracted. It is known these factors can promote inadvertent human error.

Upon reading the label on the first ampoule of heparin that he was preparing to use, the CPA saw what he expected to see, i.e. 10 International Units per millilitre in 5ml rather than the 25,000 International Units of Heparin in 5ml actually written on that label. Furthermore, since the CPA prepared the medicines for all four children in one batch, once he had inadvertently misperceived the text on the first ampoule of heparin that same error was made on each subsequent occasion.

Although the Trusts Medicines Code required all healthcare professionals (including anaesthetists) to undertake a verbal double-checking safety protocol

before administering intravenous medicines to the children, the CPA did not carry out the procedure. This was because neither he nor his colleagues were aware that such a procedure had been implemented due to the way in which policies were disseminated at the Trust.

In summary, the four PSIs were caused through the CPA's erroneous perception that he was administering the correct concentration of heparin to the four children when he was not. The human factors associated with these PSIs were the CPA's fatigue, his elevated level of arousal, the stressful news he had received, failure to carry out a verbal double-checking safety protocol, ignorance that the CDC contained high strength heparin and preparing all the medicines in one batch.

It should be noted however that even if the CPA had carried out a verbal double-checking safety protocol there is no guarantee that the error would have been identified (see Toft, B and H. Mascie-Taylor, 'Involuntary Automaticity: a work-system induced risk to safe health care', Health-care Services Management Research, Volume: 18, Number: 7 November 2005, pp. 211-216.

http://www.who.int/patientsafety/ i n f o r m a t i o n _ c e n t r e / Automaticity Patient Safety Summit.pdf

For an insight into the law and 'involuntary automaticity' see Toft, B and P. Gooderham, 'Involuntary automaticity: a potential legal defence against an allegation of clinical negligence?', Quality and Safety in Health Care, February Volume 18, Number. 1, 2009, pp. 63 – 69.

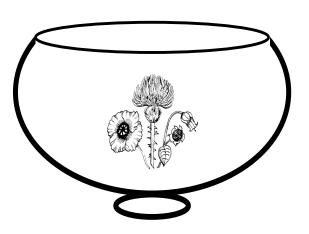
http://wwwm.coventry.ac.uk/researchnet/ HLI/Documents/Involuntary% 20 Automaticity%20-%20Legal% 20defence.pdf

The report of the Case Study can be found at:

http://www.who.int/patientsafety/
information_centre/reports/
Toft report Heparin.pdf

Some of the reasons why people fail to make appropriate decisions that were not discussed during the lecture can be found in:

Toft, B and S. Reynolds, Learning from Disasters: a management approach, (Extended 3rd Edition), Palgrave Macmillan, 2005, pp.142



Regional Society Prizewinners

This section showcases the winning trainee submissions for the research competitions of some of Scotland's regional and specialty societies. First is the submission which won the Murray Lawson Memorial Prize (the North East of Scotland Society of Anaesthetists Trainee Research prize).

Plotting Progress: novice to expert CUSUM scoring

G.Davies, L.Li, G.McLeod, C.Beecroft. Dept Anaesthesia, Ninewells Hospital, Dundee

Trainees are now required to demonstrate competence in practical procedures using "snapshot" workplace based assessments (WBAs) (1). CUSUM (cumulative sum) analysis is a statistical tool which gives an objective graphical display of performance with defined limits for success and failure (2).

Method

All departmental anaesthetists were invited to participate. Data for three core skills (intubation, subarachnoid block, arterial line placement) were collected and monthly CUSUM graphs plotted for each participant, allowing regular performance review. After three months, individual success and failure rates were calculated.

Results

CUSUM plots provided an overview of trainee's progress in acquiring new skills. Data from senior anaesthetists displayed the retention of skills, and in analysing individual success and failure rates we set limits for performance appropriate to each stage of training.

Conclusion

CUSUM is a simple tool which provides a graphical trend of performance and can be used to complement WBAs. Achieving an acceptable success rate indicates competence within the boundaries set. Failure to reach the acceptable success rate, or reaching the unacceptable failure rate, indicates the need for review or re-training. In collecting data from all grades of anaesthetist we can now set

appropriate limits for all stages of training, providing more robust, valid data.

References

- 1. Lanigan C, Blanco R. CUSUM scoring. Theory and practice. RCoA Bulletin 54, March 2009, p16-19.
- 2. Fradkin D, Tolhurst-Cleaver S, Palmer J. A learning curve for all: CUSUM curves in initial test of competency. RCoA Bulletin 54, March 2009, p13-15

Next are the winners of the West of Scotland Obstetric Anaesthetists (WoSOA) poster competition.

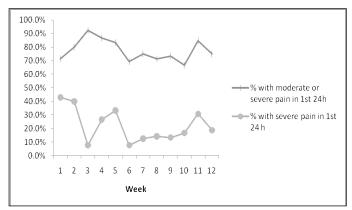
Pain management following elective lower uterine segment caesarean section (LUSCS): Are we doing as well as we think?

Riddell L (SpR), Young S (Cons), Dept Anaesthetics, PRMH, Glasgow.

Adequate post operative analgesia is something patients expect and that we have a commitment to deliver, as recommended by the Royal College of Anaesthetists (1). The deleterious effects of unrelieved acute pain are well documented including; psychological, physiological and socio-economic implications (2). Prolonged hospital stay and the development of chronic pain (a common occurrence post-LUSCS) are of particular significance in this group. There is currently no funding for acute pain services in the post-partum wards of our institution and we wanted to assess our current efficacy.

Method

Prospective audit of analgesia and its efficacy following elective LUSCS. Data was collected on all elective LUSCSs over a 12 week period. We recorded mode of anaesthesia, analgesics prescribed, compliance with regular analgesics, analgesic usage, pain scores, incidence of side-effects and incidence of moderate and severe pain in first 24 hours. Patients delivered by general anaesthesia were not included.



Graph 1: The incidence of moderate and severe pain by week

Results

Data were collected for 135 patients. The dose of intrathecal local anaesthetic and opiate varied between operators. Paracetamol was prescribed regularly in 100% of patients and NSAIDs in 95%. 89% of patients had no missed doses. Pain scores were only recorded in 37% patients. The incidence of moderate or severe pain in the first 24hrs was 79%.

Redesign of maternity services in Glasgow has resulted in the amalgamation of two maternity units to one larger maternity unit with a delivery rate of 5500 per annum. The now closed Queen Mothers Hospital was known to meet guidance of the Obstetric Anaesthetists Association (OAA) and the Association of Anaesthetists of Great Britain and Ireland (AAGBI) published in 2005 regarding training and education in obstetric anaesthesia (1, 2). We sought to determine if this standard of induction training was maintained in the Southern General Hospital.

Method

We asked trainees new to obstetric anaesthesia to examine their logbooks to provide information on their experience prior to and during induction training in obstetric anaesthesia.

Conclusions

The incidence of moderate to severe pain in the first 24 hours following elective LUSCS is high, though similar to other series following surgery. Our prescribing and compliance with regular medications is good but our delivery of PRN medication and recording of pain scores was poor.

References

- 1. Pain Management Services Good Practice. RCoA Guideline. http://www.rcoa.ac.uk/docs/painservices.pdf
- 2. Kehlet H, Hole K. Effect of postoperative analysis on surgical outcome. Br J Anaesth 2001;87:62–72.

AUDIT OF INDUCTION TRAINING IN SPECIALTY REGISTRARS NEW TO OBSTETRIC ANAESTHESIA

T McGrattan, G Stewart, SpR's, J Reid, Cons, Dept Obstetric Anaesthesia, Southern General Hospital, Glasgow

Logbook data

| | Da ys | Epi dur als | Spi- nals | GA Sections | Top up for Sec- tion | Mont hs in an- aesthe sia | thetics with distant super- vision |
|--------------|----------|-------------------|--------------|----------------|----------------------------------|---------------------------------------|--|
| SGH 1 | 11 | 10 | 17 | 1 | 5 | 18 | 18 |
| 2010 2 | 10 | 6 | 9 | 3 | 2 | 20 | 4 |
| 3 | 13 | 10 | 18 | 3 | 3 | 21 | 7 |
| 1 | 17 | 15 | 44 | 7 | 1 | 12 | 12 |
| 2 | 8 | 6 | 6 | 0 | 1 | 13 | - |
| 3 | 11 | 19 | 37 | 6 | 1 | 12 | 19 |
| QMH 2004- | 11 | 13 | 29 | 1 | 0 | 13 | 24 |
| 05 5 | 17 | 11 | 40 | 2 | 3 | 13 | 35 |
| 6 | 13 | 9 | 19 | 4 | 3 | 12 | 20 |
| 7 | 17 | 7 | 15 | 3 | 2 | 14 | 38 |
| 8 | 12 | 11 | 16 | 0 | 1 | 11 | 4 |
| QMH 9 | 14 | 10 | 12 | 1 | 2 | 12 | 6 |
| 2003- 10 | 9 | 8 | 9 | 1 | 1 | 24 | 57 |
| 04 11 | 12 | 24 | 21 | 1 | 2 | 25 | >200 |
| 12 | 7 | 1 | 7 | 2 | 1 | 28 | >200 |
| 13 | 10 | 9 | 7 | 1 | 1 | 28 | >200 |

Results

The table shows the logbook data of three trainees new to obstetric anaesthesia between February and June 2010 as well as data collected in the Queen Mother's Hospital.

Conclusion

The new Southern General Hospital maternity unit is continuing to meet the standards in training and education of the OAA and AAGBI.

References

- 1 T McGrattan, J Green, J Reid. Audit of induction training in SHOs new to obstetric anaesthesia. Free Paper, OAA, Glasgow 2006.
- 2 Guidelines for Obstetric Anaesthetic Services OAA/AAGBI May 2005

Next is the winner of the Nick Gordon Medal presented by the Edinburgh and East of Scotland Society of Anaesthetists.

The effect of anaesthesia and aortic clamping on arterial pulse power analysis based measurement of cardiac output during aortic aneurysm repair.

Craig Beattie, Dept Anaesthetics, RIE, Edinburgh

The LiDCOplus monitor (LiDCOTM Ltd) uses pulse contour analysis of an arterial waveform (PulseCOTM) to provide an estimation of stroke volume (SV) and cardiac output (CO). Calibration against a lithium indicator dilution method of measuring absolute CO (LiDCOTM) enables a calibration factor (CF) to be applied and absolute values of CO to be obtained continuously [1, 2]. A study in ITU patients suggested that the CF remains relatively constant for 24 hours so that recalibration is not needed [3]. Our aim was to determine the effect of anaesthesia and surgery for elective aortic aneurysm repair on CF.

Materials and Methods

15 patients presenting for elective open abdominal aortic aneurysm repair were recruited. CF was determined at points as per Fig 1 to the

CALIBRATION FACTOI

right. Data were analyzed using GraphPad Prism 4 for Windows (version 4.0). CF at baseline was compared with CF after epidural and GA and then following aortic clamping using paired t-tests

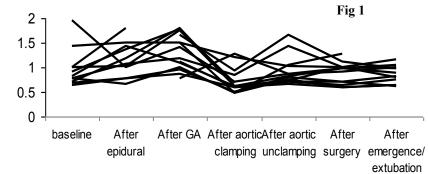
Results

Between baseline and GA (i.e. after epidural plus GA) the CF increased by a mean of 53% (14 to 91 %) (p=0.01, data from 12 patients). Between GA and aortic clamping the CF decreased by a mean of 40% (21 to 60 %) (p=0.0007, data from 14 patients). Data in Fig 2 are expressed as mean percentage change in CF from baseline (95% CI).

Discussion

Our results indicate that recalibration is required following combined general and thoracic epidural anaesthesia and following aortic clamping if absolute values of CO are required. Between baseline and GA (i.e. after establishing epidural and GA), CF increased. Continuous pulse contour derived values would therefore underestimate CO without recalibration. In an individual patient this could trigger excessive fluid loading and or drug therapy. After aortic clamping CF fell. Pulse contour derived values would therefore overestimate CO resulting in inadequate administration of fluid and or drug therapy. The absolute magnitude of error in the displayed CO would clearly depend on the true CO as measured by LiDCO (e.g. 53% of 8 litres/minute is greater than 53% of 2 litres/minute).

This study raises a number of issues. Firstly, in response to epidural block and GA the change in CF reached statistical significance while the individual effects of epidural local anaesthetic administration or induction of GA alone did not. This may be a result of the small number of patients studied and needs further work. Secondly, are our findings applicable to other commercially available pulse contour analysis techniques? The LiDCOTMplus monitor uses a unique 'pulse power' algorithm with a correction for aortic impedance that may be more robust than other methods of



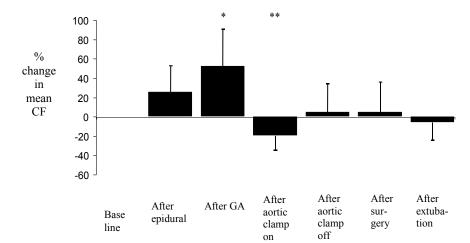


Fig 2. Mean (95% CI) percentage change in calibration factor from baseline.

pulse contour analysis [2]. In the case of pulse contour analysis monitors with no calibration — for example Vigileo/FloTrac™ - it would be prudent to assume that the validity of the values displayed may be affected by establishing epidural and GA and by aortic clamping. Finally this work has implications for the design and interpretation of other research using pulse contour analysis CO measurement such as goal directed therapy studies (where absolute values of CO or oxygen delivery are used) and studies that have used pulse contour methods for physiological observations such as changes in CO following spinal anaesthesia for caesarean section.

In conclusion, without recalibration the LiDCOplusTM monitor may be used to determine relative changes in SV and CO and to measure SV variation over the respiratory cycle. Recalibration is needed if absolute values are required.

References

- 1. Pearse RM. Equipment review: An appraisal of the LiDCO plus method of measuring cardiac output. Critical Care 2004; 8:190-195
- 2. Rhodes A. Arterial Pulse Power Analysis: The LiD-COTM system. In: Pinsky M, Payen D, eds. Functional Haemodynamic Monitoring Berlin: Springer- Verlag, 2005: 183-92
- 3. Kirwan C. A comparison of two calibrated, continuous, arterial pressure waveform based measurements of cardiac output over 24hrs. Critical Care Med 2005; 33 (12) Suppl 208-S

Acknowledgements.

Thanks to Drs Nimmo, Moores and Thomson; Cons Anaesthetists, RIE and to LiDCO Ltd, Cambridge, manufacturers of the LiDCOplus monitor.

Next are the winning oral and poster presentations at the November meeting of the Scottish Society of Acute Pain Services.

Factors affecting epidural catheter "fall out" rate.

Clare Bridgestock, Registrar, Glasgow Royal Inf.

Continuous epidural analgesia is a commonly used technique with almost 117,000 events projected in 2006/ 2007 for perioperative care (1). With a reported epidural catheter "fall out" rate of 1% to 35% (2), we decided to survey local practice and factors affecting this rate. An online survey was emailed to all acute pain nurses on the Scottish Society of Acute Pain Services register (eighteen sites).

Results

Ten sites replied with approximately 5000 epidurals (non-obstetric) performed annually. The reported epidural catheter "fall out" rate varies from 1% to 14% across the sample (mean= 5.7%); the three most common factors being poor maintenance of epidural dressings, increased patient mobility and poor initial securing of the epidural catheter. Nine sites use a direct device for securing the epidural catheter (Lockit, Lockit Plus, Epifix) and all add a clear dressing (Tegaderm, IV 3000, Neoderm). The addition of a "window" of Mefix and securing strip up the back is used by eight sites. The main problems encountered include skin blistering with Mefix (three sites) and difficulty

manipulating the epidural catheter with Lockit Plus and Epifix (two sites).

Conclusions

These results show a variety of methods to secure epidural catheters, none of which appear failsafe. The change from Lockit to Lockit Plus caused an increase in "fall out" rates at four sites, this needs to be considered when these devices are changed. Early termination of epidural analgesia is the consequence for up to 14% of patients and we should strive to improve this.

References

- 1. Cook TM, Counsell D, Wildsmith JAW. Major complications of central neuraxial block: report on the Third National Audit of The Royal College of Anaesthetists. Br J Anaesth (2009) 102:179–90.
- 2. Wilkinson JN, Sycamore HL. A survey of UK epidural practice (abstract). First European New York School of Regional Anaesthesia Symposium, London, November 2007.

Improving Acute Pain Management for Primary Hip and Knee joint replacement: the power of bundles and reliable design.

M Daniel, Cons, AM Gallagher, L McGrattan, Clinical Nurse Specialists, Dept Anaesthetics, GRI

There is a considerable gap between what we know and what we do not in healthcare. Evidence from randomized controlled trials demonstrates that moderate and severe postoperative pain remains common (1). We sought to improve postoperative pain management in elective orthopaedics. We focused on four important areas:

Development of a simple measurement tool that can be incorporated into daily practice;

Setting bold aims on what we were trying to achieve:

Developing and implementing an acute pain management bundle using the Model for improvement (2):

Designing a high reliability process.

Postoperative patients have frequent pain measurements. We had been unable to get administrative support to analyse all these pain scores. We elected to simply analyse the patient's worst pain

score in the first 24 hours. Patients were recorded as being in one of three groups based on worst pain score: "severe", "moderate or severe" (patients who had one episode of either severe or moderate pain); or "none or mild"

There are 3 elective orthopaedic theatres and a total of 15 consultant anaesthetists involved. A simple 4-element bundle was developed that would be applicable to all patients regardless of which anaesthetic or regional block technique they received.

- 1. Prescribed oral analgesia;
- 2. Oral analgesia written up regularly not "prn";
- 3. Step 2 oral analgesic given at 22.00hrs on first postoperative night; and
- $4. \geq 6$ pain assessment recordings on chart in first 24 hours.

A bundle is an "all or nothing" measurement (3); if one component of the bundle is not met the bundle is not achieved. The bundle was implemented in phased stages. Small tests of change were carried out throughout the implementation process to help to understand what worked and what did not.

We aimed to achieve 95% bundle reliability within 6 months. We set the outcome aim to reduce the incidence of both "severe" and "moderate or severe" pain by 50% in 6 months. All aims were successfully achieved within the stated time frame.

References

- **1.** Effectiveness of acute postoperative pain management: I. Evidence from published data. Dolin SJ. Cashman JN. Bland JM. British Journal of Anaesthesia. 89:409-23, 2002.
- 2. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance By Gerald J. Langley, Ronald Moen, Kevin M. Nolan, Thomas W. Nolan, Clifford L. Norman, Lloyd P. Provost 2009 2nd Edition. Joley Bass. San Francisco
- 3. Nolan T, Berwick DM. All-or-none measurement raises the bar on performance. JAMA 2006; 295: 1168 1170.

Finally please find the winner of the Annual Research Competition held jointly by the Glasgow and West of Scotland Society of Anaesthetists and the Glasgow Anaesthetic Research Club.

The "Sterile Cockpit" concept and critical phase distractions during anaesthesia.

M A Broom, A L Capek, P Carachi, M A Akeroyd and G Hilditch Registrar, STs, Cons, Dept Anaesthesia, Western Infirmary & Gartnavel Hospitals, Glasgow; Section Director, MRC institute of Hearing Research (Scottish Section), Glasgow Royal Inf.

In aviation, the "sterile cockpit" rule requires pilots to refrain from non-essential activities during critical phases of flight, below 10 000 feet [1]. These "take off" and "landing" phases are analogous to induction and emergence from anaesthesia. We studied anaesthetic distractions during these phases.

Data was recorded for 30 inductions, maintenances and emergences. Mean (SD) noise during emergence 58.3 dB (6.2 dB) was significantly higher than during induction 46.4 dB (4.3 dB) and maintenance 52 dB (4.5 dB) p < 0.001. The difference between mean noise levels during induction and emergence was 12 dB, which corresponds to at least a doubling of subjective loudness. Sudden loud noises occurred most frequently at emergence: events >70 dB totalled 9, 13 and 34 respectively through each phase. Equipment alarms and music playing showed similarly increasing trends towards emergence. Numbers of staff entering/ exiting the room were significantly greater during emergence than other phases. Mean values were 1.0, 6.8 and 9.3 respectively (p<0.001). Extraneous conversations were noted in all but two emergences but only a minority of inductions.

We have demonstrated increased distractions occurring during emergence from anaesthesia in every aspect studied. These may give rise to opportunities for patient harm. Excessive noise has several potentially detrimental physiological and psychological effects [2]. Apart from direct distraction to the anaesthetist caused by excessive movements, a busy theatre may impact on important non-verbal communications and may also hamper the calm emergence from anaesthesia of the patient [3]. Distracting concentration will impact on anaesthetists situational awareness. Studies in aviation have shown correlation between situational awareness and performance [4,5]. Interruptions have been reported as a significant contributory cause in 7% of aviation incidents [6].

The "Sterile Cockpit" is a useful concept to apply when considering the working environment and recognition of distractions and their elimination or minimisation will improve patient safety.

- 1. Sumwalt RL. Aviation Safety Reporting System Directline issue 4 1993. The sterile cockpit. http://asrs.arc.nasa.gov/publications/directline/dl4-sterile.htm. (accessed 20/09/2010)
- 2. K Kam PCA, Kam AC, Thomson JF. Noise pollution in the anaesthetic and intensive care environment. *Anaesthesia* 1994; **49**: 982-6
- 3. Smith AF, Mishra K. Interaction between anaesthetists, their patients and the anaesthesia team. *British Journal of Anaesthesia* 2010; **105**: 60-8
- 4. Endsley MR. Predictive utility of an objective measure of situation awareness. *Human Factors Society* 1990; 41-45
- 5. Venturino M, Hamilton WL, Dvorchak SR. Performance based measures of merit for tactical situation awareness. *Situational awareness in aerospace operations* 1989; 4/1-4/5
- 6. Latorella KA. Investigating Interruptions: Implications for Flightdeck Performance. Doctoral Dissertation; State University of New York 1996.

What?

Who?

Where?

When?

News from the Regions......

Many hyper-extra thanks to those who have been willing to contribute over the last 4 years.

Aberdeen - Donald MacLeod

The anaesthetic dept in Aberdeen continues to expand and thrive. There have been a number of new appointments, notably Drs Vrinda Kartha, Cynthia Szalai, Calum McDonald, Jelka Knezevic-Woods, Ram Subramaniam, and Mr Jan Jansen, all at consultant level. Jan has joined us part time in ITU whilst continuing in his current consultant post in general surgery (when not away in Afghanistan). To balance this Ian Macleod has also been appointed to ITU with dual accreditation, although this time with medicine.

Drs George Smith, Fiona Knox and John Ross have retired and we wish them all well in their respective pastimes of country pursuits, the fine arts, and ongoing audit/ research in hyperbaric medicine. Dr Abdul Sheikh retired from NHS practice in April, continuing with some private practice interspersed with holidays at his other home in Turkey. While there in October he suffered an MI and subsequently died. A celebration of his life was held in Aberdeen in December which was extremely well attended by his many friends and colleagues.

As mentioned last year the Emergency Care Centre is towering over the rest of ARI and RACH but will not have room for the National Hyperbaric Unit so it will continue on site although not within the hospital as hoped. Minor developments include the Hand Trauma service with regular "lists" to complement the main trauma service. Established consultants and associate specialist anaesthetists now provide the anaesthetic cover for a distinct Saturday Trauma List and if the cuts in nursing posts had not scuppered the plans this would have extended to Sundays as well. To date there has not been a concerted move to resident consultants at nights and weekends although we are watching these developments in neighbouring hospitals with interest.

The registrars have set up their own "North of Scotland Anaesthetic Trainees" website abbreviated to NoSats. Complementing their superior computer skills they again demonstrated their prowess on the cricket field "stuffing" the consultant's team for the fourth year in succession.

In the past year five patients have been successfully treated using ECMO in the ITU at ARI. The Suttie Centre for teaching and learning in healthcare has had a very successful first year. This was marked by a visit last month from Princess Anne for the official opening ceremony.

Avr Hospital - Ruth Jackson

Life at the seaside carries on with the usual changes of personnel and development plans. We welcomed two new consultants in the spring, Kenny Kerr who trained in the east of Scotland and Joellene Mitchell from the west who has returned to her anaesthetic roots here in Ayr. Kevin Walker has taken over the role of college tutor and with all the recent changes to the curriculum it was the perfect time for change.

Over the past ten years we have had three different plans to expand and improve the critical care facilities; our hopes were raised last year and despite modifications owing to financial pressures we were assured they would go ahead this time. Third time lucky? But no such luck, they are 'on ice' yet again until after May's visit to the polls and probably another long period of consultation and indecision. We will believe it when we see it!!!

On a brighter note, the view of Arran with snow covered hills in winter and sparkling seas in the summer still makes it a pleasant place to be......

Balfour Hospital Orkney - Colin Borland

What to say about 2009/2010 in the Anaesthetic Department, Balfour Hospital?

Since there are only Marek Wolanski and Colin Borland manning this Orkney outpost perhaps we could mention other people in whom readers may have an interest. Maggie Broad crossed the Pentland Firth from Wick to join the Theatre Nursing team at the beginning of the year, and left in October having seen enough of the Northern Lights to last a lifetime and with her husband has headed into retirement at their French home in Fumel in the Lot Valley.

Overseas visitors to Balfour Hospital were mainly from Poland or were Poles working in the UK, leading me to regard my position in the departmental office as the 'token' Scot. Undoubtedly we were pleased to make the acquaintance of Jan Slodowski and Ewa Geska who visited from Krakow and Warsaw and undertook several months of locum cover. Jacek Swierczewski (Shetland) and Jacek Rychter (Stornoway) have been here for varying lengths of cover. The Elgin Anaesthetic department have loaned us Iain MacDonald and Bernd Zaunseder from time to time and Diana Jolliffe took time out from her busy post in Northampton.

No year would be complete without an appearance or two by Kuki Anand from Omagh. This year Kuki brought her husband Ken, and we are pleased to report that the artist in him has fallen for the attractions of Orkney land and seascapes - thus guaranteeing their future return. By now you will have guessed from the long list of locum appearances that we have not found the right person or people to fill the 2 FTE vacant posts. But we are still looking, and Colin Borland has not been allowed to make the transition into full retirement!

The year has seen our nursing staff make continued progress with Anaesthetic competencies and they should be 'signed off' in the forthcoming months. However, I must not end without mentioning that Marek twice became a proud father during the year. He and his wife Anya had a son (Jan Andrej) born in Orkney in May. And Marek's second much-heralded 'arrival'? A Draeger Primus anaesthetic machine which arrived after a very difficult gestation period!

Borders District General, Melrose - Tom Cripps

The Borders Anaesthetic Department managed to survive the last year despite pig flu, snow and lots of maternity leave. (Shona Smith and Immogen Hayward are now the proud owners of baby boys...) As usual we have challenges balancing Departmental demands with surgical demands and hope to employ some short term Consultant Locums to address this. Meanwhile Rob

Forbes is off on sabbatical to New Zealand – and Heather Matthews (currently at ERI) will be doing his locum.

News from the Far North

Caithness - John MacLeod

2010 has been an eventful year here in Caithness, with a considerable amount of going and coming. For the greater part of the year, we were down to one consultant in post, with outstanding support provided by the excellent folk from Fife -a special word of thanks to Dr Savage and all his colleagues who helped out throughout most of 2010. In September we were joined by two new consultant appointments: Danuta Solanska, a colleague well-know to the hospital, having previously worked here as a locum for 18 months in 2006/7 and Sunil Kumar, who joined us from London. Both are settling in, but Dr Kumar is still adjusting to the pace of life here in Caithness. We're all keen to build bridges and develop meaningful networks with our local DGH colleagues, something that has proved problematic in the past. The challenges of providing high quality care within a remote and rural environment remain. I must conclude on a positive note - the launch of a Scotlandwide retrieval service for adult patients is a major advance, improving patient care and eliminating the risks associated with the removal of anaesthetic cover during patient transfers as was customary previously.

Crosshouse - Chris Hawksworth

Crosshouse Hospital's anaesthetic department is expanding more rapidly than the author's waistline. Monica Doshi has joined us from Inverclyde as a Speciality Doctor, and Fiona Kingswood has joined Granny Sylvia and Margaret on the secretarial side. Early in 2010 Gordon Houston and Ross Simmons took up consultant posts in ICU, followed by Nick Brown and Colin Pow who joined the general side in November. We also appointed Paul McConnell to an ICU post in December. Paul will be starting in March as a replacement for the about to retire Roger White. With the return of Alison Speirs from maternity leave, the ICU contingent is up to full strength again. When Stan Zimmer retired, the ICU nurses were saddened that they were going to miss out on the occasional sighting of a toned, lycra-clad bicycling ICU consultant in the unit. Ross Simmons has apparently more than made up for this, wearing not only lycra shorts, but a flashing lighthouse on his head as well. Perhaps this high visibility apparel explains the awful on calls he's been having.

All these consultant additions allowed the author to escape from ICU to the general/obstetric on call rota last February. Within ten months I had been put out to pasture on the weekend trauma rota with Drs Shaw, Martin and Michie. There is no truth in the rumour that I was so

crabbit when called in for those urgent 3 am epidurals that the midwives at Ayrshire Maternity Unit pleaded with the CD to have me removed from the mat rota.

Our trainees continue to chop and change so frequently that the photo board designed to help identify members of this rare species is frequently out of date. We'll soon be saying goodbye to Clare Newton Dunn who is continuing her training in the west of England, and to others, too numerous to mention, who are returning to Glasgow or taking maternity leave. Congratulations to Ker Wei Tan and Chris Holmes on passing the Final FRCA, and to Dominic Strachan on passing their Primary exams.

Dr. Gray's - George Duthie

I am happy to give a more upbeat report this year of life at Dr Gray's. We now number 9 consultants with the addition of Dr Philippa Armstrong from Stoke Mandeville Hospital. Philippa, who has a major interest in Chronic Pain, manages to work full time and also to look after 4 children and an husband who flies for a living. Clearly a superwoman!

Dr Robert George has also rejoined us again from Hull. He has a major interest in peripheral nerve blocks as well having served as a doctor with Her Majesty's Forces overseas.

At present, we're all wondering what the £35million cuts in NHS Grampian mean for us in Elgin!

Fife - Gordon Smith

Life in NHS Fife in 2010 carries on as usual. The same old problems are still causing us concern, but at least there is hope on the horizon.

Firstly, an update on our new hospital extension in Kirk-caldy which will eventually house all acute services in Fife. This is progressing well and remains on target for completion and handover to NHS Fife on 28th October 2011. There follows a 14 week commissioning period with the first patients due to move in during January 2012. The move of patients from Forth Park to the main acute site will mean that we no longer have the distinction of having the only isolated obstetric unit in Scotland. Forth Park Hospital will be demolished and the site sold off for housing. Queen Margaret will become a Diagnostic and Treatment centre with Day Case Surgery only provided.

The move will mean a major change in how our emergency anaesthetic services will be provided. The need to provide junior and senior cover out of hours at 3 sites will disappear with all on call based at the Victoria Hospital. This will probably mean only three trainee rotas

instead of four - two for anaesthetics and one for ICU and two consultants on call overnight. The detail remains to be worked out, but we hope to avoid the consultants being resident on call overnight. However, for the next 15 months we will continue to struggle to provide the anaesthetic cover demanded of us and will rely heavily on locums and the good will of our permanent staff

On the staffing front there have been few major changes in 2010. Mick Dockery has decided to take up a permanent position in Ireland thus returning to his roots. We are indebted to Jonathan Cheung, Mike Gill and Simon Bolton for holding the fort while he was on his sabbatical. He has been replaced by Fiona Barron who joins us from the South-east of Scotland rotation. Fiona has an interest in obstetric anaesthesia and will have a major role when these services move to our new facility. Simon Bolton remains with us in a locum capacity, Mike Gill has moved west to become a consultant at Golden Jubilee, Glasgow and Jonathan Cheung is now a consultant in Truro in Cornwall. Our junior staffing is still an issue, but the numbers have stayed within the predictions of 2 years ago. However, there remain a lot of trainees around with CCT pursuing the very few consultant jobs available in Scotland due to the increasing financial pressures on all health boards. The good news coming from the Scottish Government is that things will get even worse in 2011! Looking back is that not what they said about 2010!

We now have 3 trained Physician Assistants – Anaesthesia and I would like to thank Joy Neal, Mark Hastie and Ruth Beattie for the contribution they have made into the smooth running of the department particularly in the pre-assessment process. We have 2 trainees, Catherine McCue and Vicky Pemberton, who are sitting their final exams at present and I wish them success.

Finally there has been a major change in the management structure with the reduction in Clinical Directorates from seven to three which was implemented on 1st November 2010. From the anaesthetic point of view we now form part of the Planned Care Directorate which also includes the surgical specialities and obstetrics. As this is the last report from a Clinical Director, Theatre and Anaesthetics in NHS Fife, I would like to thank the whole department for coping so admirably over the ten years that I have held this position with the many issues that have been thrown at us. I am confident that, with our input, the smooth running of the anaesthetic service will continue under the new management arrangements during the move into our new hospital facility.

Forth Valley - Judith Wilson

Well how quickly 2010 has passed. It has been a busy year for us all in Forth Valley, especially with the new Forth Valley Royal Hospital (FVRH) opening its doors for the first time in August 2010.

During Phase 1, day surgery services, laboratory services, some outpatient services and Starbucks opened! Things ran very smoothly, well after the scavenging had been turned on! We have now been up and running for 5 months.

The final phase of moving will occur in July 2011 when the acute services from Stirling Royal Infirmary move across. After that we await the building of the Stirling Community Hospital for the outpatients that don't fit in FVRH - ophthalmology, dermatology and chronic pain.

We have appointed three new consultants in Forth Valley in 2010. We would like to welcome Dr Simon Evans, Dr Hanlie du Plessis and Dr Srikanth Lakshminaryan to our department. We all look forward to working with our new colleagues for many years to come.

Dr Robin McKinlay retired on 1st January 2011. He has been a long and valued member of the department and in 2010 he won the Scottish Health Award for improvement and innovation, in recognition of his commitment and professionalism to Chronic Pain and Anaesthesia. Robin has been dedicated to developing chronic pain within Forth Valley and will be missed by all staff and patients. We wish Robin a very happy retirement.

Dr Donna Clayton has flown off to pastures new. Having been a Staff Grade in the department for many years, Donna has achieved her lifetime dream of becoming an airline pilot and is now working with Logan Air.

Glasgow Royal Infirmary - Geraldine Gallacher

They say the only constant is change and the NHS is a pretty good example- the last year has seen some momentous changes here at Glasgow Royal Infirmary. We have lost our Urology and Vascular services: Urology to the Southern and Gartnavel in August, and Vascular to the Western at the end of October. Various personnel who previously considered themselves Royal Infirmary staff wander Glasgow, syringe in hand - flexible sessions have never been quite so flexible. There are now no inpatient beds for either service on site at GRI, so it is to be hoped patients are not so unaccommodating as to have more that one thing wrong with them at a time. There is thought to be no truth in the rumour that Management are looking at an expanded interhospital form of the laboratory pod system, adapted for patients instead of blood samples. Apparently nothing could be done about the percentage which vanished without

trace.

Things are looking good in the Intensive Care Unit - we now have West and East wings; the existing unit being West and the newly built, East. My favourite bit is definitely the magic glass in the cubicles - one flick of a switch from transparent to opaque! (Dr Geddes did point out she could have had a couple of trainees for the magic glass budget, however). The expanded space will allow Stobhill's ICU beds to move down at some point in February, with space for some HDU beds. The final number and configuration of these beds are to be confirmed.

The Princess Royal Maternity Hospital has had the busiest year in its history with 6400 deliveries and a CS rate that just keeps getting higher and higher. The creation of a twilight shift for trainees has been popular with everyone but in the absence of the trainee cloning machine it looks as if it may not last.

The Ambulatory Care Hospital at Stobhill has settled well and teething problems are pretty much ironed out now

In terms of personnel we have to congratulate Drs du Plessis, Shree and Evans, all of whom have now taken up their posts in Forth Valley. Congratulations also to Malcolm Sim on his appointment at the Western, and Colin Pow, who's gone to Crosshouse. Andy MacKay is joining the Victoria and Ajit Panickar the Southern... but we get to keep Alex Puxty, who will be taking up his Consultant post here at the Royal, joining the ICU team. They have all been fantastic colleagues and we'll miss them greatly - treat them well or we'll take them back! Malcolm Daniel has left us for American shores-Harvard, actually - but only temporarily. He'll be back next year and in the meantime Andy MacKay has been ably filling in.

Once again GRI does its bit for the future with new arrivals for Jane Wilkinson, Laura Strachan, Hari Kalagara, Neil Logan and Karim Elkaswary.

We now await the final move of all inpatient beds from Stobhill hospital. This is expected in February but last minute delays are never surprising.... although you'll hear the rest of that story next year.

The Institute for Neurological Sciences - Linda Stewart

We have had a busy year in the Institute. 2010 saw the birth of the Scottish Airway Group, a cohort of Scottish-based consultants who have an interest in training in difficult airway techniques. This has been supported by a great deal of input and hard work from Dr Valerie

Cunningham. She has organised the inaugural meeting that will take place in Glasgow in February next year. Please check the SAG website for details.

In ITU we have completed a pilot study with our medical physics colleagues measuring brain impedance in an attempt to measure ICP non-invasively. We now hope to take this forward with a subsequent study in our patient population. We are a study centre for Eurotherm: hypothermia as treatment for raised ICP in head injury. To this end, we have purchased a cooling device, which we have used successfully on a number of occasions. We are actively contributing detailed data to RAIN, the ICNARC run audit of outcome in head injury We have also been contributing to the AVERT-IT project which is developing a neural network to predict secondary insults before they happen.

In staffing, Dr Bryan Dawson joined the team of 15 consultants in June and Dr Janet Pollock will retire in December, after many years service, as one of only two paediatric neuroanaesthetists. She will be greatly missed and we wish her "all the best" for the future.

Glasgow Western & Gartnavel - Colin Runcie

Much has changed here at Gartnavel in the last year. More consultants retired in 2010 than perhaps any other year in the department's history. Ian Kestin, Gordon Todd, John Henderson and Jim Dougall have all stopped working; Ellen Howie has given up her full-time job but continues part-time until the end of March. Their departure represents the passing of a gentler age. Each of these individuals made a substantial contribution in hospitals across Glasgow over many years. The sum total of their collective effort and experience simply beggars belief and we wish them all well in their retirement.

They have been replaced by a fine group of (largely) young persons. Michael Macmillan is now a consultant on the General rota in the West; Paul Harrison, David Reid and Malcolm Watson have similarly taken up consultant jobs on that rota. Lesley Green has been appointed with a Pain interest and Malcom Sim with sessions in ICU. Many of our trainees have moved on to greater things. Stephan Dalchow has been appointed to a consultant post in Wishaw with an ICU interest and Nick Brown is now a consultant in Crosshouse; Catherine Eckersley has bravely emigrated to New Zealand to be a consultant there.

The unstoppable force that is the GG+C Acute Services Review continues to exert its full weight on GGH and the Western Infirmary. The West sector is no longer involved with the paediatric dental service and thanks to those who preserved high standards over many years in the face of increasing difficulties. North sector Urology has centralised in GGH while North and South sector Vascular Surgery have appeared in WIG after several false starts related to refurbishment problems. If the maxim that transferred resources are always a little less than transferred workload is true, then testing times lie ahead.

Though apprehensive about the bracing financial climate ahead, our passion, joie de vivre and sense of humour remain undimished.

Hairmyres - Andrew Mitchell

Hairmyres hospital has seen its fair share of changes over the year, both in its staff and in its workload. The term "revolving doors" would not be a misrepresentation. Out the door, so to speak, went Elizabeth (Liz) Rankin, and Gordon Weetch. Both will be greatly missed, but less so Dr Weetch, as he revolves back in the door for two sessions per week until retirement really does sound like a good idea! Another "revolver" is our new consultant recruit, Shona McConnell (formerly Fraser) who will be leaving us shortly to have her first child in early 2011. Congratulations and our best wishes to her until she revolves back in! All this spinning has obviously made our HR department dizzy as they are dragging their heels over advertising the temporary and permanent replacements. I am sure not a unique problem! Our Physician Assistants in anaesthesia are continuing to settle and develop their skills and the first year of Critical Care Practitioner trainees qualify at the end of 2010.

I think we are finally filling the gap left by the removal of the thoracic unit to the National Golden Jubilee Hospital. NHS Lanarkshire has provisionally centralised vascular surgical services to Hairmyres Hospital and recruited an additional colorectal surgeon. These factors and the gradual clawing back of patients from the National WLI Hospital, Clydebank has seen a clear increase in our theatre activity. Now we need a bigger ITU/HDU!

Top of our "honours list", this year is Bill McCulloch, who has completed no less than 1 marathon, 2 half marathons and survived cycling to work regularly despite crashing his new bike into a parked car! All this inspired activity, no doubt, a result of seeing his contemporaries reach that revolving door aforementioned! Congratulations to Jane Burns who takes another step upwards in management reaching the position of Divisional Medical Director of Acute Services.

And finally, sending the rest of us barking mad are the ever increasing number of Hairmyres anaesthetic consultants purchasing puppies and showing off their "growth and development" on their latest iphones. Roll on 2011!!

Inverclyde

Inverclyde has spent the year juggling competing pressures of services and training, eying expected but unknown cutbacks and all the time trying to keep looking like the duck above the water. In common with many departments, we are looking at options for covering rotas and watch developments across the country with interest and some with concern.

Our current trainees all seem to be working away hard, most at some stage of sitting the first part. The text books and requests for vivas pile up. We appointed Eshika Knox to a new Specialty Doctor post in the summer, she was here briefly before going on maternity leave (congratulations) and we look forward to welcoming her back in the New Year.

No other deliveries, unless you add the three new bikes in the department; Martin Schwab can reach ever further parts of the globe, Manfred Staber commutes via deepest pot holes in the west with impunity and Duncan Thomson dabbled with cyclocross racing with much huffing and puffing. Bob Campbell has been asked to ski-race with a Glasgow club and is now looking at Winter Olympic schedules to see if they conflict with Man City fixtures.

Not content with a previous cycling related collar bone break, Grant Tong attempting to push back Father Time played squash (against a girl, shhh!) and succeeded in rupturing his achilles tendon. We don't know the score at the time, an information blackout remains. Boredom meant he came back to do some Pain Clinics as early as possible and several weeks earlier than a Consultant colleague (from another department) who had the same injury. Management were delighted at his dedication, well we assume so anyway.

Ben Lartey and Clara Jacks have finally managed to move onto Specialty Doctor contracts and enjoy the recognition of the work they both do, and have a protected SPA. John Myles has walked miles over the year with his beloved dog meanwhile Artur Pryn has spent every holiday under the water in exotic locations but still dives Loch Fyne the odd weekend. Fiona Munro and Lew-Chin Chee when not keeping the males in their place have deliberated on the soft furnishings for their second homes, well they don't cycle much.

Squash has accounted for one back, one knee, one achilles and one gastrocnemius in the past two years; there is a message there somewhere...

Lance de Boil

Monklands Hospital - Roddy Chapman

Monklands continues to thrive and I am sure a major factor for this is the excellent group of trainees that have been with us in 2010. Thanks must go to Pam Dean for her hard work in helping to rationalise our airway trolley and for helping to set up the Liverpool Care Pathway in our ICU.

David Blacoe was appointed as a consultant in February and has already made a big impact on the department! The provision of milk, coffee and tea bags in our theatres was recently withdrawn which also coincided with a price hike in the WRVS café! However Dr. Blacoe had being making contingencies for this and he subsequently organised a coffee fund which led to the recent procurement of a machine — David clearly must have completed a special module at The Golden Jubilee Anaesthetics Department as a registrar!

Dr Alison Walker has moved to a hospital in Australia and is sadly missed. We all wish her and her family all the best for the future. We look forward to welcoming back Andy Ody, one of our Associate Specialists who is returning from a year in Australia. Lauren Joyce and Lynn Maxwell were appointed to permanent positions as Physicians Assistants in Anaesthesia and are making a valuable contribution to the clinical service.

Vimty Muir has been responsible for bringing the NES mobile skills unit to Monklands in December. As part of this a number of us were trained as facilitators at the Scottish Simulation Centre, and we will hopefully be able to put these skills to use at Lanarkshire's new Medical education training centre at Kirklands Hospital.

National Waiting Times Centre—Ken McKinlay / Isma Quasim

Tucked away and forgotten in a little known corner of Glasgow called Clydebank are a group of individuals who form the Cardiothoracic Unit at the Golden Jubilee National Hospital. Created by an evil genius from 4 pre-existing departments we have evolved over the intervening three years from hugely to just mildly dysfunctional. We have our own on site psychologist and also have a' big brother' style diary room where people can let off steam. We have enough psychopathology to keep Sigmund Freud in EPA's till kingdom come. Luckily we have the delightful people in the Orthopaedic side of our department to act as the Mr. Hyde to our Dr Jekyll!

On a more serious note we are fortunate enough to be housed in a lovely building with a Costa Coffee! We even have offices with nameplates on the door! The orthopaedic side of the department continues to go from strength to strength, with the Golden Jubilee carrying out approx 10-15% of all primary Arthroplasty in Scot-

land. The median stay has been pushed down to 5 days with the introduction of the 'Caledonian technique' which combines a wound catheter approach, multimodal analgesia and aggressive physiotherapy with the patients getting up on the day of surgery. This program is going from strength to strength with plans afoot to build another orthopaedic theatre. We recently welcomed two new esteemed colleagues to this side of the department; Dr Mike Gill who has appeared from the East Coast and has interests in regional anaesthesia and medical education, and Dr Paul Campbell who will split his time between us and the sexy Helicopter Docs. We welcome them both.

Over on the cardiac side bypass cases seems to be rarer than the dodo as the clever cardiologists pinch our daily bread by threading their spindly catheters into hitherto uncharted territory. We only get to anaesthetise those patients who the cardiologists don't fancy or the ones with said spindly wires sticking out from the front of their hearts. With the cries of "Time is muscle!" echoing through the corridors, our ICU workload continues to evolve with increasing patient throughput from cardiology/ primary PCI as well as those from cardiac surgery. We also house the National Acute Heart Failure/ Mechanical Circulatory Support Service; this has been a steep learning curve for all involved in the programme, but we are now placing the Heartmate 2 ventricular assist device with a reasonable expectation of a good outcome.

Anaesthetic trainees in their thousands seem to have streamed through the doors since we formed the single Heart and Lung unit at GJNH and we have been very appreciative of the enthusiasm and hard work that they have shown, especially in the more difficult "early" days. Shree Lakshminarayan, Rosie Snaith and David Reid have been the first cardiac fellows to pass through the unit and have been invaluable colleagues.

On a final sombre note we would also like to remember Dr Pavel Polovinkine who sadly passed away in September 2009. He was a most valued member of the department and is sadly missed by all.

Tales from Tayside - The Ninewells News - Fiona Cameron

2010 has been a quieter year than last year. Our major managerial restructure is bedding down. Praveen Manthri has taken over from Neil Mackenzie as Clinical lead for anaesthesia in Ninewells. We are grateful to Neil's sustained hard work over the past few years. There will be no rest for him as he continues in his role as Clinical Director for anaesthesia.

Six Tayside trainees have secured Consultant posts this

year. Congratulations to Sudhakkar Marri who has gone to Birmingham to help set up a regional service, Mario Fernandes who returned to Inverness (must have been good as an SHO) and Corina Lee has taken a locum post in Edinburgh Sick Kids. Our department has expanded again this year. We welcome new Consultants Christina Beecroft, Jason Hardy and Mike Neil (locally grown) and Ben Ullyatt who ventured North from Edinburgh (to our gain)

We said goodbye to Robin Allison who retired this year. He will be missed however I am sure he will put his newly found time to good use on the golf course. We wish him well in his retirement and we wonder when he will become a scratch player.

Our trainees as usual are jetting round the globe. Megan Dale is spending a year in Oz and Steph Sim has returned from a year in New Zealand.

The Netcare contract for the SRTC at Stracathro reached its end last year. There has been expansion of the regular NHS work carried out there and several of our Consultants regularly work there in addition to the Stracathro incumbents.

As usual we will be expected to deliver an efficient quality service with increasing budget constraints next year. However I am sure we will rise to the challenge.

Royal Alexandra Hospital, Paisley - Jackie Orr

Greater Glasgow and Clyde implemented their Car Parking policy on the RAH site on September 5th 2010. Vociferous campaigning against the proposed changes met with no compromise from management. Robert Simpson had become the spokesperson on behalf of the staff but his valiant efforts were in vain. Robert resigned from his consultant post and left us in October. The hospital car park is half empty and the neighbouring streets are littered with cars. Angry Paisley residents retaliate with vandalism (cars keyed, windscreens broken, wing mirrors damaged) and verbal and written abuse. There are large collections of notices issued by the parking company mounting up in hospital departments.

A big change swept over the department in June. We miss the buzz, the bursts of raucous laughter that our very own legend Jim Canning brought with his tales from the workface. The trainees miss his wise and humorous counsel. Jim has been on sick leave. We look forward to his visits and we wish him well.

On the trainee front, the status quo has been maintained this year and we continue with ACCSs, CTs, and STs or equivalent. Malcolm Smith has tried to explain the intricacies of the new curriculum to us so that we can fill out the requisite forms with enthusiasm.

The problem of medical cover at the Vale of Leven rumbles on. The 3 anaesthetic locums are leaving to be replaced by 9 new consultant physicians! There seems to be some dragging of feet yet again, so in the interim Locums are being sought at top rates of pay. Efficiency saving?

In February 2011 Tom Ireland retires after 27 years as a general and Intensive Care consultant. I am leaping on the bandwagon and will take voluntary early retirement at the same time (only 25 $\frac{1}{2}$ years). Hilary Aitken has volunteered to write the annals report next year. Thank

Perth Royal Infirmary - Michael Forster

As I begin writing, in early November, I look out from the deck of the good ship "Perth" and see snow-topped hills under a blue sky. Sadly there are ever fewer windows through which to enjoy the views, as they fall prey to ongoing building work. A new endoscopy unit and Nuclear Medicine facility have enveloped the anaesthetic department, so we have decanted to the old labour ward. How many of you can say that your kids were born in your office? We have made the most of out new home, and the enhanced location has helped us establish a preassessment service. The move also encouraged us to buy a bigger, better fish tank. Restocking it has gone well other than a brief period of murky green! With financial gale warnings in all sea areas, the future sometimes seems somewhat murky too. But the excellence and resilience of our (increasingly female) trainee shipmates encourages me that things will work out fine in the end. Liz Grant has abandoned ship to a well earned retirement after nearly 14 years with us. Her position as chief crossword completer has been ably filled by Barbara Reay, who we also congratulate on her promotion to Associate Specialist. I have handed over the Clinical Leader helm to Duncan Forbes, who is sure to run a tight ship. Outside work, our annual departmental sailing weekend on the Clyde has become a week long Hebridean adventure. This year 4 of us made it to St Kilda (and back). Mike Bell's photographic record of the trip is a real treasure. Next year we are pressing a second yacht into service. Ashore, bicycles remain the preferred mode of transport, and lycra the dress of choice. We are all staying fit and aging well. As I finish writing, in mid December, the scene is arctic. The good ship "Perth" is truly snowbound.

Raigmore - Ross Clarke

Antenatal tours of labour ward in Raigmore are destined to be much less stressful in future. The agonised wailing and moaning noises coming from the obstetric department are said to be greatly diminished. No, we have not pioneered a new method of analgesia. John May (Past President of the Society) no longer practices the bagpipes in his office outside labour ward. John claims to have retired although he has since been committing anaesthesia more regularly than some of us who remain in full time employment.

Dr May was joined in retirement this year by Drs Isobel MacKenzie and Richard Johnstone. All will be sorely missed for their wisdom, experience and excellent company. I was privileged to share an office with Isobel and Richard and their guidance and mentorship greatly eased the transition from trainee to consultant.

This year has seen that same office go on to be nick-named "the crèche" as we have welcomed four new Consultants into the department. Dan Baraclough, Morven Wilson, Lisa Handcock and Mario Fernandes all joined us this year and have already begun to stamp their mark on the place. We are also delighted to have appointed Dr Charu Agrawal as a new staff grade this year.

Our department continues its quest to repopulate the highlands! Dr Sandy Hunter is to be congratulated on the recent birth of his daughter Sarah and I (with some assistance from my wife, Reen) seem to have managed to produce a fine specimen of a son, Finlay, whose only fault is that he is unreasonably cheerful (noisy) at 6am.

The last 12 months have seen changing places as well as changing faces. Chic Lee has completed a glorious three years as head of service and is reacclimatising to life as one of the drones. Ken Barker has enthusiastically stepped into the breach (or was ordered at gunpoint depending on who is to be believed) and has not yet developed the twitches and tics associated with the role. Jonny Whiteside has recently been appointed as clinical director for the entire surgical directorate championing the cause of anaesthetics and intensive care at the highest levels.

We in Inverness share the same management pressures as the rest of Scotland but I have to say that all those problems fade away as we commute home through the beautiful scenery, some by car, some by bike and occasionally even some on skis.

Royal Infirmary, Edinburgh - Ian Armstrong

This year saw the 24th Festival of Anaesthesia ably organised by Professor Ian Powell, Anthony Pollok and John Wilson. Secretarial support was provided by Cindy Middleton who as always was the one who actually did all the work and made it run like clockwork. The occasion was used in part to mark the retiral of Gordon

Drummond from the Department, whilst less formal gatherings to mark this have been enjoyed by all. Gordon's retiral was also celebrated by the ODP's who were contemplating an operating list without some bizarre piece of apparatus having to be found room for in the theatre. This celebration however was short lived as they learned that he had taken up an honorary position to continue his research work and involvement in teaching. For the rest of us, we are delighted that his optimistic outlook, deep cynicism of anything on NHS headed notepaper and a wealth of knowledge are still on hand, albeit on an part-time basis. Rumour has it that he has at last got the hang of the use of neostigmine!

Our congratulations must go to Tim Walsh on his appointment to the first University of Edinburgh Chair in Critical Care Medicine and our acknowledgement to all those who have worked over the years in support of this position. Critical care under the continued stewardship of Brian Cook have clearly mastered the art of job planning. Involve as many people as you can in an unbelievably complicated rota and no one will understand it. At the last count it is rumoured that the rota for ICU in the Royal involved 18 consultants from across Lothian, but then that may just be gossip!

Meanwhile, David Brown has decided to step down from his role as Clinical Director. In stepping down he has finally taken that well trodden path of all previous Clinical Directors and no doubt to be taken by future incumbents, of trying to reduce the usage of sevoflurane. Cynics may feel he has bowed to a Pharmacy and Clinical Management Group view that if chloroform was good enough for James Young Simpson and Hendry Boyle managed with a bottle, that should be good enough for the rest of us. However, we thank him for all his hard work in steering Anaesthesia in Lothian through ever increasing outside impositions and trying to take colleagues with him. Herding cats comes to mind

Whilst we may be being asked to save on drugs costs, monies are still clearly available for new developments. A system of electronic tagging designed to help locating mobile pieces of equipment is now being trialled on patients in the Day Surgery Unit. Rather akin to airports, we can now locate patients on 32 inch screens pinned to the walls throughout the place. Use of the term 'Departure Lounge' may be misinterpreted and somewhat at odds with objectives of the Scottish Patient Safety lobby, but we watch with interest, anticipating the no doubt next step of tagging staff. New developments on the clinical side include the setting up of a national scoliosis service driven on the anaesthetic side by Stella McLaughlin, Kate Carey and Heather Spence. Like all new developments of service, this seems to

involve long anaesthetics and even more machines to go beep at you. It has the full support of the rest of the department, if only in some quarters because it doesn't involve them.

Adam Paul, Laura Fitton, Karen Darrogh and Craig Beatie are welcomed this year to the Department as they take up Consultant appointments. Karen joins the obstetric team with Alistair McKenzie and Bernard Heideman fighting a rear guard action to avoid this becoming a women only preserve. Craig, on the other hand, joins the all men team in transplantation whilst Adam, continuing his involvement in postgraduate education and patient safety, together with Laura join the main department

Trainees in the department are rather like the buses, you see none for days then they all appear at once. Their numbers may be decreasing but their enthusiasm and love of travel has certainly not. Murray Blackmore has recently returned from the chills of Toronto only to have his enthusiasm quashed by being given the rota to organise. Jo Irons, Emma Anderson and Kevin Souter, possibly foreseeing this eventuality, have opted to leave for warmer climes as they head off to Sydney, Melbourne and Brisbane.

Nothing stands still but some things don't change. David Farqhuarson, currently Clinical Director for Women and Children's Services in Lothian, takes over as Medical Director for Lothian in the new year, whilst Charles Swainson, in a final flurry of activity, continues to berate us to do more with less. SPA's, EPA's, PA's, availability allowances, contractual night shifts, appraisal, revalidation, job planning.... but at the end of the day there is still a patient, propofol, morphine and yes, sevoflurane!

Shetland - Catriona Barr

2010 has been the usual busy year in Shetland Anaesthetics. Highlights included Jack Swierczewski's wedding to Dorota in June in Poland. He had a Hamefarin in Shetland in August which all of the anaesthetists were able to attend thanks to Marek Wolanski from Orkney acting as a locum anaesthetist for us that weekend. Dorota and Jack's hotel-room bed was enlivened by a visiting retired resuscitation dummy wearing a Viking helmet and accompanied by a bed full of whole wheat pasta (the hotel had said no rice!). Good luck to them in their married life together.

Other than that we continue to fight the good fight against the gall bladders, colons and prostates of Shetland. From October 2010 we have the welcome prospect of retiring from conducting air ambulance ITU transfers as the teams from EMRS in Glasgow take over

that duty! While the transfers themselves are interesting the post transfer slump at 4am in an Aberdeen hotel is no longer inviting, never mind the awkward questions at the airport when you try and get clinical kit home on a scheduled flight!

St John's University Hospital - Duncan

Henderson

The building works at St John's should be complete in the New Year. We've converted 3 wards into a large 23 hour stay unit for Lothian, developed an acute receiving area for medicine and combined 3 specialties into the Lothian Head and Neck Unit (ENT, Max-Fax and Plastics). Patrick Armstrong has done a fine job playing musical chairs with various wards and Specialties as they were decanted to allow the works to take place. Surprisingly, his office hasn't acquired a jacuzzi in all of the alterations.

We are delighted to welcome Murray Geddes (new Consultant post), Richard Burnett (locum Consultant), Heather McAllister and Chris Hoy (Specialty Doctors). Christina Opranescu has left us for a post in Devon. We wish her well. Ellis Simon will sadly no longer bring bags of sweets to St John's as the ENT surgeon he worked with has retired. Claire Caesar and Morag Renton are both back from Maternity Leave and enjoying a rest at work.

Jean Bruce, our Lead Research Nurse, aided by Mike Fried, has undertaken a National Audit of Scottish air ambulance transfers. This is the first time such a large survey has been undertaken in the UK. It will inform the way forward for both the SGHD and SAS.

Southern General, Glasgow - Kenny Pollock

It seems to be all change at the Workhouse this past year. The year started with the amalgamation of the Southern and Queen Mother's maternity units – into a labour ward space much, much smaller than either of the previous two. All consultants had to decide which side of the general/ Matty ship they wanted to jump onto. Vascular surgery left the Southern in August, relocating to the Western temporarily (for 5 years). This void was replaced by all of urology from the GRI soon afterwards. Theatre staff are in disarray looking for the replacement to the 'what if there's an aneurysm?' line. A kidney stone just doesn't sound the same.

Further on the construction front the new £842 million hospital was signed off and work began at a break-neck speed, ensuring that if we run out of money at least we'll get a couple of multi-storey car parks built. The new Glasgow Laboratory building is well under way, and the demolition of offices, admin buildings, library and canteen(!) Is complete. Sadly the post-graduate

facilities and lecture theatre were also recently demolished – with no plans to replace them in the proposed 6 years it will take to complete the new hospital. Or even afterwards. We have been reassured that we will not need any post-grad education facilities other than that which you can get on YouTube.

The drive towards greater efficiency has led to drives of a different kind. Consultants and trainees alike give a cheery wave to each other as Southern operatives travel to the Vic to do lists, passing Vic employees travelling to the Southern. In the anaesthetic room we have a new game called 'find the muscle relaxant', where the competitor has one hour (or £1400) of theatre time to find the £4 ampoule of Roc to start the case. We've been LEANed, DoSA'd, Enhanced, fixedSPA'd, deSPA'd, naeSPAs, deDISCOed, and pretty much FUBARed.

Early in the year David Marsh retired to work on his golf handicap and Paul Campbell moved to the Jubilee. Therese Murphy and Claire Barker moved onto our Obstetric Consultant rota, Ryan Moffat joined our pain team, and we were also joined by the GRI anaesthetists doing their old urology lists, and also Noel Borg and Paul Calleja. Our military anaesthetists Hamish Hay and Gavin McCallum just can't seem to get enough of that Afghani sunshine.

Many of our trainees are packing their bags after a round of successful interviews. Bryan Dawson has moved up the road to the Institute, Gordon Cowan to Lanarkshire, and Paul McConnell to Crosshouse. August saw the usual trainee musical chairs game whereby all but 3 of our previous year's trainees moved 1 mile to the north, or 2 miles to the east. Several chairs were removed before the music stopped.

Stobhill - Roger Hughes

This must be the last report from Stobhill as a separate entity from GRI. As winter approaches what is the highest point in Glasgow, the current plans are for all acute services to leave the site in February leaving only the six ACH theatres (and ECT) to be serviced from the Mother Ship in Castle Street. The new ACH is working well especially now that the fire doors in between the Anaesthetic rooms and theatre have been fixed to stay open when patients are being moved. Despite my cynicism the extension is well under way and should be finished soon.

Angus McKee retired in March, thankfully fully recovered from Hep C, leaving me the oldest Consultant for the short time before I leave the scene I think he plans to climb all the Munros again. Dev Sewnauth is winding down to retiral in December. He may be replaced by a Pain Consultant meaning Tom Mccubbin will finally

retire and his new Jaguar XF will no longer grace our car park.

For those who remember Harry Freedman, who retired 18 years ago, he was a patient in our ICU in February and is now back in the community as irascible as ever. Even further back in the past Jimmy Stirling, who must be nearly 90, appeared in our local paper as a resident of Buchanan Nursing Home. For those of us couch potatoes Jenny Cuthill shamed us by coming 22nd in the world duathlon championship in Edinburgh and 2 weeks later finishing a 12 hour Triathlon in France

I think that's about it, it's been fun, thank you and good night.

Stracathro Hospital - Charlie Allison

The SRTC (but please let's call it Stracathro!) has been pretty busy. Although most folk are from Tayside, we've had patients from Peterhead & Dunfermline. Our new fourth theatre is tight for space - the table & anaesthetic machine need to be set at jaunty angles and the gas-person sits up on a bar-stool (but sadly no Martini).

Three new consultants have joined the Dundee travelling folk. We have found Jason Hardy & Ben Ulyatt two enthusiastic country lads and Christina Beecroft a Queen B with lots of buzz. She has championed enhanced recovery knee replacements using infused LA (pump-delivered or using 'Checkitt chuckies').

Jim Dougall attended NESSA's 50th Birthday, enjoying a solid scientific meeting and a fairly liquid dinner. Jan Beveridge, all posh with pearls, is our new President and gave an excellent address "A Question of Position" (steady lads!) on the history of Malta.

Victoria Infirmary - Neil Smart

Change is inevitable. Except from the vending machine in the New Victoria Hospital.

2011 sees the retiral of three well known superstars in the Victoria Infirmary firmament.

Pete McKenzie takes early retirement having made a major contribution to chronic pain (and Long Term Conditions) over many years, both at a local and national level. Latterly working with the Scottish Government, Pete has always managed to juggle his extensive professional commitments with a keen interest in football and cycling. We wish both Pete and his family all the best for the future.

Cammy Howie retires in March and without a supplement to the Annals, I'm unable to list his many achievements in anaesthesia, intensive care and management.

There are few areas in which Cammy has not succeeded and rumour has it that just like Jesus, he has recently mastered walking on water. Mind you, Queens Park pond was frozen at the time so I don't know if it counts.

More pain for Pain with Gavin Gordon's departure in the Spring. Gavin has been an integral part in the development and expansion of pain services across Glasgow and his dry wit and sage advice will be sadly missed. As will his calming influence in ENT... Over the years, Gavin has built up a fine collection of bikes and he always said he would stay just as long as there was another Cyclescheme bike on the horizon. Something else to blame Her Majesty's Revenue for.

Welcome to Peter Stenhouse, who joined us as a consultant with an interest in Intensive Care, and congratulations to Simon Evans who left to take up a consultant appointment in Forth Valley.

Finally, the weather. Every winter I adjust my car wheels so they don't slip on the ice. Snow chains there then

Western General Hospital - Susan Midgely

Last year I mentioned that the neuro-anaesthetists were attending many meetings regarding the reprovision of the Dept of Clinical Neurosciences (DCN) on the Royal Infirmary site. I can report that, following discussions with the Scottish Government, the new build will not take place with the new Sick Children's. However, NHS Lothian remains "fully committed" to building new accommodation for DCN. This is going to run and run. More news next year?

On the staffing front we welcome Damien Mantle to the main department following a period as locum consultant. Anthony Bateman has joined ICU and has now taken over running of the home ventilation service. Claire Baldie, a former south east Scotland trainee, has returned from Newcastle as a locum. Chris Winter has been appointed physician's assistant and is finding his niche.

In April we had our Health Environment Inspection. There was quite a frenzy of painting and cleaning in the weeks leading up to the big day. Not that I am complaining. I am just a little cynical about the hygiene monitors which appeared outside all the toilets.

ICU had a refit over Easter and now looks very state of the art. This was quite a major undertaking as all the patients had to be decanted to the surgical HDU and then transferred back. Fortunately, it was a quiet spell.

The breast unit is being refurbished with money raised

from the Moonwalk. A second, much needed, theatre is being built. Unfortunately, the funding didn't run to equipping the theatre so one of the theatres in the day bed suite is being mothballed so that the equipment can be transferred.....

The Paderewski building has been demolished and in its place the new Royal Victoria Building is taking shape for services for the elderly, rheumatology and dermatology. During the demolition a time capsule was found in the foundations relating to the time when the building was the Craigleith Children's Home.

Wishaw General Hospital - John Martin

That time of the year again. Time to take stock of departmental events, the comings and goings of our group, and the wilder ideas of NHSL and the NHS in general.

Firstly, two new consultants have joined us. Gordon Peters has joined the ranks of the Maty team, while Stephan Dalchow has come back to us with an input to ITU (coinciding with a sea change for our ITU consultants who now do a week of days each). Kenny Mathieson, an ex-trainee, has returned as a Staff Grade.

Departures. As I indicated last year, Seamus Thomson retired in January. Dawn Johston, after 7 years with us found the lure of a man too much and absconded to Carlisle with her new husband.

Other new arrivals – albeit in a more junior capacity – are Colum Slorach's baby daughter Nuala, and Gordon Peter's new daughter Rosie. Mums, dads and brothers seem to be coping. While on this subject, the older members here are looking askance at the new appearance of "paternity leave" and "parental leave". Where were these when we needed them?

We continue to work with PA-A trainees, and a welcome series of FY1 doctors who seem to enjoy and to benefit from our teaching.

Last year it was LEAN! This year it is HEIS. After a flurry of cleaning activity in the theatre suit, removal of all sorts of useful stuff lest the place look untidy (or useable), laminating everything that stood still, banning of watches in the hospital (patients' relatives can keep theirs), banning of inappropriate, i.e. comfortable footwear, they didn't even visit theatres! Comfortable footwear and timepieces are surreptitiously making a comeback. It's a pity they couldn't solve the health hazard to staff who have to negotiate the main entrance's fug of smoke and piles of cigarette butts.

Lanarkshire never changes.

RHSC Yorkhill - Ross Fairgrieve

Greetings from Yorkhill. Once again it is time to ponder the happenings of the last year and wonder what they may mean for the future.

The move to the Southern General campus remains high on everyone's agenda. Unfortunately the planned all singing all dancing New Children's Hospital has resulted in absolutely no singing or dancing thus far. There seems to have been a loss of confidence in the planning process with medical staff feeling a distinct lack of consultation. The questions surrounding the issues of under-resourcing remain and there is increasing unrest concerning the adequacy of the build for our continually increasing workload.

The Paediatric Neurosurgery debate continues and to an extent came to a head this year. All interested parties, with the blessing of Greater Glasgow and Clyde Health Board, sought an external peer review. The outcome of this is keenly awaited. However we have to be realistic here. Recommendations may be made but there is no guarantee that our neurosurgical colleagues will understand them let alone agree to follow them. We have been round the houses with this one more than once after all.

Within the theatre suite work pressure remains high. Weekend working is upon us it would seem. Two non-consultant surgical colleagues are now job planned to work electively on Saturdays although anaesthetic cover for these sessions remains an issue for management. We can only expect pressure through job planning, perhaps more so for future consultant colleagues.

On a lighter note no babies are known to have succumbed following the closure of the Queen Mother's Hospital earlier in the year. In fact the department welcomed the arrival of three newborns this year. Dr Susan McIlveney gave birth to her daughter Francesca, Dr Judith McEwen had a second daughter Rowan and my son Charlie arrived in April.

The department also welcomes new colleagues Dr Sarah Hivey who was appointed as a consultant and Dr Ewan Wallace who is currently in a locum consultant post. Dr Rob Ghent returned from his antipodean travels an older and wiser man and yet remains intent on paediatric cardiac anaesthesia.

We say a farewell to Dr Colin Lang from Stirling Royal Infirmary and wish a warm welcome to his replacement Dr Jonathan Richards who will be with us over the next year every Friday as part of our outreach working program.



Peebles 2010

The Society's Spring meeting was held in Peebles Hydro on Saturday 24th April 2010 with the Trainees' Meeting preceding it on the Friday. Disturbing change will follow in May this year when the Society's Spring meeting takes place in Crieff Hydro after many years in Peebles.

The Friday golfing experience at Peebles Golf Club saw Charlie Allison emerge as victor with a sterling 36 Stableford points. Donald MacLeod claimed the booby prize with somewhat fewer and thus broke the long run of (booby) achievement of the Crosshouse department.

The Society AGM kicked off activities on Saturday and saw a number of changes to the Society line-up. Paul Wilson from Crosshouse, Ayrshire was elected as Vice-President. Ian Johnston, Crawford Reid and Sue Midgely came to the end of their periods with the Council and thanks to them for their efforts. Ross Clarke (Inverness), Judith Wilson (Falkirk) and Alastair Baxter (Edinburgh) have been called up to the majors and we look forward to their contributions.

The AGM was followed by the Keynote Lecture delivered by Pam Cupples from Yorkhill. Pam had been asked to provide an Update on Paediatric Anaesthesia. She delivered a very helpful resume of current thinking across a wide variety of suitable topics, though her remarks about the possible effects of anaesthesia on the early growth of the brain provoked audible concern. A quick coffee and then we plunged into the Registrars Prize presentations. Quality contributions from Alistair May, James Limb, Julia Robertson, Vishal Uppal and John Antrobus continued the high standards of recent years. Paul Wilson and Professor John Kin-

sella acted as judges and Alistair claimed the Donald Campbell Quaich.

The morning concluded with another innovation, namely reports from John Colvin and Kathleen Ferguson who sit on the RCoA Advisory Board and Scottish Standing Committee respectively. The questions and answers which followed were animated and (in the main) illuminating. This part of the day will continue and may expand a little.

After lunch, Jim Dougall was installed as President with John May handing over the chain of office. Both men wore the kilt for the occasion. Jim then went on to give a passionate and detailed account of the life and times of our national instrument, the bagpipes. His most enjoyable chat was preceded by a moment of rare emotional power when John May entered the lecture room playing a lament on the pipes. Jim was followed by Professor John Kinsella from Glasgow Royal Infirmary who gave the Guest lecture on "Trials and Tribulations – anyone can do useful research." John spoke well (as always) and gave clear guidance on how to produce useful research in an era dominated by multicentre studies involving thousands of patients.

The meeting concluded with Jim presenting the Donald Campbell Quaich to Alistair May. Later, at the President's Reception, the less academic prizes were handed over, prior to the Annual Dinner Dance. The wide spectrum of attendees at the Dance (from young children of members to retired members to past speakers) ensured a distinctive and relaxed atmosphere and fun was had by all.





John Kinsella and Jim Dougall



Peebles High St



Trainee presenters - Alistair May, Vishal Uppal, Julia Robertson, John Antrobus and James Limb.



Views from Peebles Hydro.



The executive











Lyndsey and Jim.

Donald Campbell Quaich

Performance of rapid sequence induction (RSI) on simulated patients by novice anaesthetic trainees

May A, Maran N. Scottish Clinical Simulation Centre, Stirling

Safe and reliable performance of rapid sequence induction (RSI) is an essential skill for all anaesthetists and is a core competency of early anaesthetic training. A previous audit carried out at the Scottish Clinical Simulation Centre demonstrated an alarming variability in practice amongst novice anaesthetic trainees in Scotland. This study examined the current practice amongst novice trainees after introduction of 'skills & drills' training.

Method: Novice anaesthetic trainees were observed performing RSI during simulated scenarios. Data was recorded using a standardized checklist including pre-induction checks, drugs administered and techniques used.

Results: A total of 47 trainees, with 3-6 months anaesthetic experience were studied. Less than half of trainees optimised position for intubation (19:40%), or checked table tip (21:45%). 10 (21%) trainees pre-oxygenated for less than 3 minutes with no attempts at vital capacity breaths. 94% of trainees used thiopentone with a dose range of 5-10mg/kg and all administered suxamethonium. In 19% of inductions, there was no request for cricoid pressure. In 10 cases where the trainee had difficulty with intubation, only 4 verbalised their laryngoscopy view and 3 did not call for help.

Conclusion: In contrast to a similar study carried out 8 years ago, novice anaesthetic trainees from across Scotland demonstrate more consistency of practice in RSI. All trainees studied had satisfactorily completed RSI competency assessments in clinical practice; however standard of performance in an 'unsupervised' simulated situation was not optimal.



Our President presents the Quaich

Factors responsible for inequalities in maternal outcomes among different ethnic groups.

V Uppal, MA Leonard, SJ Young. Department of Anaesthesia, Princess Royal Maternity Hospital, Glasgow

Recent reports from the UK Confidential Enquiry into Maternal and Child Health and UK Obstetric Surveillance System (UKOSS) have highlighted inequalities in the rate of mortality and morbidity among different ethnic groups. ^{1,2} We aimed to find out what are the underlying factors that might be responsible for differences in these outcomes.

Methods: We conducted a retrospective cohort study using a hospital maternity database from July 2007 to October 2009. Continuous variables were analysed using the two-sample t-test. Categorical data was analysed using the chi-squared test. One-way analysis of variance (ANOVA) was used to analyse continuous variables during subgroup analysis.

Results: There were 13714 deliveries in our unit during this 27 month period. Ethnicity was recorded for 11306 parturients. 9653 parturients belonged to the non-ethnic group. There were 1653 deliveries recorded for the ethnic population. These included African/Caribbean-Black (402), Chinese (254), Indian (140), Pakistani (240), Ethnic White (351) and Unclassified Ethnics (266). There were significant differences between different ethnic groups. Gestation at first review was four weeks later for the ethnic population (p<0.001). Subgroup analysis showed that women of African origin had a higher BMI (p<0.001) and a higher caesarean

section rate (p<0.001) when compared to all other groups. The Chinese women were least likely to use opioid or epidural analgesia during labour (p=0.002). On the other hand, a significantly higher proportion of mothers from a non-ethnic background smoked cigarettes (p<0.001).

Conclusion: We conclude that poorer outcomes in the ethnic population can be partly explained by the factors reviewed in this study.

References

- 1. Lewis G, ed. The Confidential Enquiry into Maternal and Child Health (CEMACH). Saving mothers' lives: reviewing maternal deaths to make childhood safer—2003-2005. London: CEMACH, 2007.
- 2. Knight M, Kurinczuk JJ, Spark P, Brocklehurst P. Inequalities in maternal health: national cohort study of ethnic variation in severe maternal morbidities UKOSS. BMJ 2009 Mar 3; 338: b542

Mode of delivery and type of anaesthetic associated with triggering modified early obstetric warning score (MEOWS) systems.

K O'Connor, **J Robertson**, J Reid. Anaesthetic Department, Queen Mothers Hospital, Glasgow

MEOWS systems are CEMACH¹ recommended. We aimed to assess mode of delivery and anaesthetic type associated with red and yellow triggers.

Methods: All patients delivering over a 4 week period were identified and case notes analysed retrospectively.

Results: 264 patients were identified with 247 case notes available for review. 189 had charts with >1 recording. 31 patients triggered a red score while 90 triggered a yellow. Scores are summarised in Table 1.

Discussion: Patients undergoing general anaesthesia triggered higher mean scores. Patients receiving an epidural triggered around double the mean red score compared with spinal anaesthesia. Of red-triggering epidural patients, 33% had a caesarean section and 66% delivered vaginally. Caesarean section patients trigger more than double the number of red scores than SVD patients.

However, once a score is triggered, all delivery modes have similar mean red scores. Patients not undergoing a caesarean section are less likely to become unwell but once they do they are as unstable as post-operative patients. Vaginal instrumental deliveries trigger scores similar to caesarean sections.

References:

1. CEMACH. Saving Mother's Lives: Reviewing maternal deaths to make motherhood safer. 2002-2005. London RCOG Press. December 2007.

Perioperative acute renal failure: a reply to the Scottish Arthroplasty Project.

J Antrobus, D. Semple, Royal Infirmary of Edinburgh

The Scottish Arthroplasty Project (SAP) provides a new perspective for the investigation of complications related to anaesthesia in patients undergoing joint replacement. The SAP Annual Report 2008 revealed a higher than anticipated incidence of post-operative renal failure in our hospital over a 5-year period. In order to improve our outcomes we aimed to identify aetiological factors and address them.

Method: A list of all patients coded as acute renal failure within 30 days of joint replacement in Lothian from 2001-2006 was provided by SAP. We reviewed the patient notes to look for predisposing factors, management and outcomes. We used the RIFLE classification to categorise the level of renal failure in our patients, which has been validated in critical care.

Results: 54 patients were coded as developing postoperative ARF. Of these, 20 had been miscoded. In the majority of the remainder, the aetiology of renal failure was multi-factorial and causes included hypovolaemia (11/22) due to nausea, poor oral intake or diarrhoea, hypotension (10/22), and nephrotoxic drugs (16/22) such as ACE inhibitors, intravenous radiocontrast and non-steroidal anti-inflammatory drugs.

Conclusion: Miscoding was a significant factor. In many of the remaining patients the deterioration in renal function could have been ameliorated with earlier recognition. Awareness of the issue was raised at Anaes-

 Table 1.
 *FVD=Forceps/vacuum delivery

| | | Red | | Yellow | |
|-------------|-------------|-------------------|----------------------|-------------------|----------------------|
| | | Patients N (%) | Triggers N (mean) | Patients N (%) | Triggers N (mean) |
| Delivery | SVD n=125 | 6 (4.8) | 24(4) | 35 (28) | 125 (3.6) |
| | FVD* n=84 | 11 (13.1) | 53(4.8) | 18 (21.4) | 117 (6.5) |
| | LSCS n=38 | 14 (36.8) | 60(4.3) | 37 (97.4) | 261 (7.1) |
| Anaesthetic | GA n=5 | 2 (40) | 22(11) | 3 (60) | 34 (11.33) |
| | Spinal n=70 | 8 (11.4) | 23(2.9) | 26 (37.1) | 119 (4.6) |
| | Epid n=43 | 9 (20.9) | 50(5.6) | 21 (48.8) | 191 (9.1) |
| | None n=129 | 12 (9.3) | 42(3.5) | 40 (31.0) | 133 (3.3) |

thetic and Orthopaedic Mortality and Morbidity meetings, emphasising the importance of post-operative management, and we have implemented a protocol for renal prophylaxis prior to contrast radiological studies. We will follow the effect of these over subsequent annual reports.

Development of age-specific effect-site TCI propofol

J Limb (SpR), N Morton (Cons), RHSC, Glasgow

Effect-site propofol TCI (eTCI) offers logical dosing and rapid attainment of effect-site concentration (Ce). Paediatric age-specific keo values have now been published^{1,2}. We simulated anaesthesia using the available datasets prior to a validation study in children.

Methods: We used TivaTrainer to simulate 60 minutes of anaesthesia at Ce 5µg/ml from 1 to 10 years, with an ideal weight of 2(age+4) kg. The end points were propofol dose at induction, 20 and 60 minutes, and the peak propofol concentration.

Results: All eTCI modes deliver larger induction doses than Paedfusor plasma TCI (Fig 1). Paedfusor eTCI with the adult kee leads to induction doses above 5mg/ kg, as does Jeleazcov in 1-2 year olds. The highest maintenance rates and total doses are with Jeleazcov in younger and Munoz in older children. The greatest peak concentrations are with Paedfusor in younger and Jeleazcov in older children.

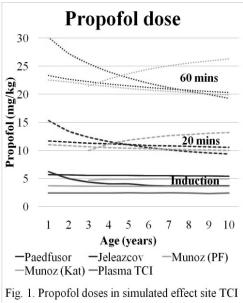
Discussion: Larger induction doses with eTCI confirm more rapid induction of anaesthesia can be expected. The available datasets give different infusion profiles in practice. The Munoz / Kataria dataset² is limited by a lower age limit. Jeleazcov¹, with an age-dependent k_{eo}, offers a truly age-specific effect-site TCI propofol infu-

Conclusion: Modelling is important to establish the predicted behaviour of effect-site TCI in-vivo. This work is a prelude to a safety and pharmacokinetic study in children, and forms part of the ethics and regulatory submission for the study.

References

- 1. Jeleazcov et al. Pharmacodynamic modelling of the bispectral index response to propofol-based anaesthesia during general surgery in children. British Journal of Anaesthesia 2008; 100: 509-16
- 2. Muňoz et al. Estimation of the plasma effect site equilibration rate constant of propofol in children using the time to peak effect. Anesthesiology 2004; 101: 1269

Editor's note. The 5 abstracts above competed for the Donald Campbell Quaich. The 2 below won prizes in



the Trainees' Poster competition.

Difficult airway communication. C. Beattie, A.F. McNarry. Dept Anaesthesia, Western General Hospital, Edinburgh

Scottish GPs use a computerised system [1] where diagnoses are coded for records and referral letters. Their code for "difficult tracheal intubation" is .SP2y3. If anaesthetists included this code in their Airway Alert Letters then information might be more effectively communicated back from the community.

Methods. We emailed a questionnaire to College Tutors and secretaries for cascading on to Consultants in 24 Scottish hospitals.

Results. We received 129 replies (17 hospitals). When communicating difficult airway episodes, 63 (49%) write letters, 40 (31%) record information elsewhere and 24 (19%) inform the patient. Only 39% always write. 58 (92%) write letters after a failed intubation, 52 (82%) when laryngoscopy grade was 4, 39 (62%) when 3b and 20 (32%) when bag valve mask ventilation was difficult. 96% (122/127) had been alerted to a difficult airway by old anaesthetic charts and 93% (118) by patients. Regarding the code .SP2y3, five (4%) knew it existed while 88 (69%) thought it useful. Of 82 answering, 47 (57%) planned to use the code in future discharge letters.

Discussion. Despite recommendations [2], less than half of respondents write Airway Alert letters. Most relied on anaesthetic records, that may not be immediately available, or from the patient who may be incapacitated when assessed. Use of .SP2y3 when anaesthetists and

GPs communicate should improve patient safety.

References.

1. GPASS- Clinical Software. www.gpass.scot.nhs.uk
2. DAS. http://www.das.uk.com/guidelines/airwayalert.html

Confirming death: A Survey of Current Practice. Lowe G., Jefferson P, Anaesthetics Dept, Dumfries & Galloway Royal Infirmary

In 2008, the Academy of Medical Royal Colleges published guidance on the diagnosis and confirmation of death (1). We decided to investigate current practice and compare it to these guidelines.

Method: We sent a survey to the junior doctors in our hospital. Questions focused on the confirmation criteria used, documentation and the period of assessment. We also examined the notes of deceased patients to assess the documentation.

Results: We e-mailed 64 trainees and 30 (47%) replied. 100% assessed the pupils, absence of heart sounds and respiratory effort. 97% assessed the patient for 3 minutes or less. Only half said they assessed the motor response to pain and 27% checked the corneal reflexes. We reviewed 33 sets of notes and in 13 (39%) cases there was no documentation of the assessment performed. Of the remaining 20 cases, response to pain was documented in only 8 (40%) cases and corneal reflexes were documented in none. Cardiovascular assessment was performed for a median of only 2 minutes. Time of death was clearly wrong in 16 (48%) of the 33 notes reviewed

Discussion: The 2008 guidelines state that the patient should be observed for a minimum of 5 minutes to establish that irreversible cardiac arrest has occurred, and that this should be followed by assessment of the pupils, corneal reflexes and the motor response to supra-orbital pressure. Our results suggest that in practice, the time that patients are assessed for is inadequate and that response to pain and corneal reflexes are assessed infrequently.

References

(1) A Code of Practice for the Diagnosis and Confirmation of Death; Academy of Medical Royal Colleges October 2008

Editor's note. The following abstracts are the remaining entrants for the 2010 Trainees' Poster competition

Evaluation of lumbar puncture simulator Mk2 as patient simulator for lumbar puncture and epidural procedures. V Uppal, RJ Kearns, EM McGrady Dept Anaesthesia, Princess Royal Maternity Hospital, Glasgow.

Neuraxial anaesthesia and analgesia is one of the advanced technical skills that can be challenging to teach to novice anaesthetists. Lumbar puncture simulator Mk2 (KKM43B) is a newer version of a similar manikin that allows for epidural insertion. We aimed to determine if this simulator is a valid tool for training and assessment of novice anaesthetists for epidural or spinal insertion. This was done by asking the views of experienced anaesthetists on the resemblance of the simulator with real patient insertion.

Method: The ethics committee opinion was sought and deemed not to be necessary. Anaesthetists with an experience of at least 75 epidural insertions were invited to participate in this evaluation study.² The participants performed an epidural insertion followed by a lumbar puncture procedure on the simulator. Various aspects of both epidural and lumbar puncture insertions were scored by anaesthetists for lifelikeness using a Likert scale (Strongly disagree-zero points, disagree-one point, neither agree nor disagree-two points, agree-three points, strongly agree-four points)

Results: 18 anaesthetists (ten consultants and eight registrars) participated in this evaluation study. The simulator was found to be lifelike for most aspects of epidural or spinal insertion by experienced anaesthetists. Feel of supraspinous ligament and ligamentum flavum were borderline for lifelikeness. Most anaesthetists found threading of epidural catheter difficult and rated it as unlike a real patient.

Conclusion: The overall impression was that the simulator will be a useful tool for training and assessment of both epidural and spinal insertions.

References

- 1. www.limbsandthings.com
- 2. Naik VN. Devito I. Halpern SH. Cusum analysis is a useful tool to assess resident proficiency at insertion of labour epidurals. Can J Anaesth 2003; 50: 694-8.

AUDIT OF PREPAREDNESS FOR ANAESTHETIC EMERGENCIES. Dr Gruszka, CT1, Dr Panchagnula, Cons, Dr Bansal, Cons, Central Manchester Hospital Trust

Healthcare reorganisation in North-West England led to several hospitals being merged with creation of new theatres. This was a risk assessment of the preparedness of staff for emergencies. A questionnaire was designed to assess whether theatre staff were aware of the presence and location of key anaesthetic equipment & drugs (cardiac arrest, difficult intubation and massive haemorrhage trolley, intralipid and dantrolene) in General, Women's & Eye theatres. Expected standards were 100%. 55 Trainees & anaesthetic assistants were approached. Response rate was 85% with 57% of responses from assistants (n=27) & 43% from trainees (n=20).

In General theatres, 15% of trainees weren't aware of location of cardiac arrest/difficult airway trolleys; 25% were unaware of dantrolene/massive haemorrhage equipment. Assistants' Unaware rates were 17-33%. In Women's hospital, only between 21 to 36% could identify the correct location of these key pieces of equipment. Anaesthetic assistants revealed between 73% to 100% awareness but were particularly poor for intralipid (75% awareness only). No Eye hospital trainees were aware of the existence of emergency equipment and 25% of assistants were unaware that intralipid was stocked here; an area of wide local anaesthetic use.

The issues identified were multiple areas of work, rotation of

trainees and locums. Now a locations document is in induction packs with a copy in anaesthetic rooms. We will reaudit in six months time.

Prophylaxis of post-operative vomiting in children: Have the published guidelines changed practice? Owen $T^{\#}$, Pettigrew T^{*} , Limb J^{-} , ${}^{\#}$ Medical Student, * SpR, RAH Paisley, ${}^{\sim}$ SpR, RHSC Glasgow

Post-operative Vomiting (POV) is a common complication of anaesthesia and surgery in children (1). During spring of 2009 the Association of Paediatric Anaesthetists (APA) published guidelines for the prevention of POV in children. An audit by one of the authors (TP) during spring 2008, when the draft guidelines were issued, revealed significant discrepancies in the recommendations and practice at that time (2). It was expected that full publication and wide dissemination of these guidelines might have altered practice.

Method: A student attached to the department of anaesthesia attempted to obtain a snapshot of POV prophylaxis prescribing by retrospectively analysing available case records across 5 days in September and October 2009. The age of the patient, nature of surgery, length of surgery and administered antiemetic prophylaxis were recorded.

Results: Data were obtained for 49 of the 102 cases that were considered higher risk (adenotonsillectomy, strabismus surgery or surgery >30 minutes duration). Only 3 (20%) of the adenotonsillectomy or strabismus patients received dual agent prophylaxis with ondansetron and dexamethasone. None of these patients received both drugs in the recommended doses. 14 patients were given ondansetron as a sole agent. Only 7 of these (50%) received the recommended dose (0.15mg/kg).

Conclusion: The published guidelines appear to have done little to alter practice in a tertiary paediatric hospital. Although this audit was small, it suggests there is still a reluctance to use dual agent prophylaxis for high risk procedures. There is also little evidence of the recommended dosing being implemented.

References1) APA GBI *Guidelines of Prevention of Post-operative Vomiting in Children 2009*. [online]. Available from: http://www.apagbi.org.uk/ [accessed 2nd February 2010].

2) Pettigrew T. Prevention of post-operative vomiting: Do the draft APA guidelines reflect current practice. APA GBI Annual Scientific Meeting (poster). Brighton, 2009

Paracetamol prescribing errors in emergency paediatric surgery. Stuart E, Pettigrew T, Dept Anaesthetics, Royal Alexandra Hospital, Paisley

Prescribing errors are more common in the paediatric population¹. There are a number of strategies suggested for reducing medication errors, though there is little evidence of effectiveness within the paediatric population². However, some UK departments report improvements in their paediatric prescribing through audit and simple interventions³. Concern was raised at the authors' hospital, that a large number of post-

operative paracetamol prescriptions were incorrect and required changing.

Method: This was a retrospective audit of 60 consecutive emergency surgical paediatric case records in a district general hospital. The details of all pre-, intra- and post-operative prescribing of paracetamol were recorded. Specifically, any alterations to the post-operative prescription were identified and reasons for this sought. The standard for prescribing was taken from the Acute Pain Guidelines from the RHSC, Glasgow.

Results: 59 case records were available for review. 23% (n=8) of anaesthetic post-operative prescriptions were amended. 4 out of 8 prescriptions were amended incorrectly. Taking 20mg/kg +/- 20% as a standard for oral dosing, 80% of preoperative and 73% of post-operative prescriptions were incorrect. The dose range for oral paracetamol administered was 4-29mg/kg.

Conclusion: Few prescriptions written by anaesthetists were amended. However, there were a significant number of incorrect prescriptions at all stages. Specifically there appears to be confusion regarding 15mg/kg or 20mg/kg dosing. It is likely that other hospitals with similar infrequent paediatric exposure have similar problems. Ways to improve prescribing are being discussed and future audit post intervention will hopefully demonstrate improvements in practice.

References

- 1. Ghaleb M, Barber N, Franklin B et al. The incidence of prescribing and medication administration errors in paediatric inpatients. *Archives of Disease in Childhood*. [Online] 2010. Available from: doi: 10.1136/adc.2009.158485
- 2. Miller M, Robinson K, Lubomski L et al. Medication errors in paediatric care: a systematic review of epidemiology and an evaluation of evidence supporting reduction strategy recommendations. *Quality and Safety in Healthcare*. 2007 16: 116-126
- 3. Courtman S. What a generalist needs to know about paediatric anaesthesia. *Presented at the AAGBI WSM* London 2010.

Partners Being Present During General Anaesthesia Caesarean Section. Keir McIlmoyle, Fiona Bryden, Elaine Armstrong, Glasgow Royal Infirmary Labour Ward

A trainee allowed a partner into the operating theatre during a general anaesthetic which was a great success. So I undertook a survey of all staff members involved during caesarean sections. **Method**: A questionnaire was given to midwives, anaesthetists, obstetricians, nursing auxillaries and anaesthetic assistants relating to partner's presence in theatre for regional and general anaesthetic. Specifically they were asked their view on: 1. partners being present during regional anaesthesia for caesarean section 2. if they had no objection to partners being in

| Table 1 | 1. regional (no. of staff members) | 2. no objection (no. of staff members) | 3. only post intub (no. of staff members) | 4. only post birth (no. of staff members) |
|-------------------|--|--|---|---|
| strongly agree | 24 | 3 | 1 | 1 |
| agree | 26 | 5 | 14 | 5 |
| neither | 15 | 4 | 8 | 9 |
| disagree | 11 | 38 | 38 | 54 |
| strongly disagree | 4 | 31 | 21 | 22 |

theatre during general anaesthesia 3. partners being in theatre during general anaesthesia but only after intubation 4. partners being in theatre during general anaesthesia but only after the baby was delivered.

Results: A total of 81 surveys were completed. The combined staff results for the 4 questions are shown in Table 1, p 40.

Conclusion: A third of anaesthetic staff agreed that partners being present was a good idea and others were open to considering it in the right circumstances. Obstetricians are becoming similarly open to considering it. However other members of staff, in particular midwives, are vehemently opposed to partners at general anaesthetic sections. Interestingly there is still opposition to partners being in theatre for regional caesarean section which has been very successful.

Survey of Postoperative Opiate use in Day Surgery patients at Hairmyres Hospital, East Kilbride. Dr Prit Anand Singh, Dr Rahul Karve, Dr Grant Haldane, HGH.

The principles of Day surgery (DS) require good postoperative analgesia with minimal side effects ensuring rapid recovery and discharge. At Hairmyres Hospital, there is a protocol for postoperative administration of either Morphine or Morphine and Alfentanil based on Pain scores. This regime is intended for in-patient use. However, it appeared that significant numbers of DS patients were regularly receiving inappropriately large amounts of these drugs potentially delaying their discharge.(1) We therefore surveyed perioperative analgesic use in our DS patients.

Aims: 1 - Quantify the number of DS patients receiving long acting opioids in recovery, the amount used & whether discharge was delayed as a result. 2 - to review the appropriateness of take-home analgesics of patients who received long acting Opiates. We considered the use of ≥10 mg Morphine & a total discharge time in excess of 4 hours post surgery as significant.(2)

Conclusion: Prospective survey, over 4 weeks during Jan/ Feb 2010. Total patients: 117. Of these, 25 had either Morphine or Morphine/ Alfentanil according to their Pain scores postoperatively. 5 patients had a slight delayed discharge; however no patients were admitted overnight. The reason for delay was either drowsiness or Post Operative Nausea Vomiting. It was therefore concluded that although inpatient analgesia regimes were being used inadvertently, there was no evidence of a significant delay in discharge. All patients received appropriate take-home analgesics as advocated by British Association of Day Surgery.

References:

- 1. Basu NN et al. Morphine delays discharge following ambulatory surgery: a prospective institutional study. <u>J Perioper Pract.</u> 2009 Aug;19(8):254-6.
- 2. Shirakami G et al. Delayed discharge and acceptability of ambulatory surgery in adult outpatients receiving general anesthesia. J Anesth. 2005;19(2):93-101

PREOPERATIVE FASTING: RECOMMENDATIONS VS REALITY Dr.C Wallace, Dr.A Kamat. Dept Anaesthesia, Aberdeen Royal Infirmary

We follow the AAGBI fasting guidelines that recommend preoperative fasting times of 6 hours for solids and 2 hours for liquids. This audit analyses actual fasting times in three surgical specialties compared to the AAGBI recommendations.

METHODS: In-patients undergoing elective gynaecological, plastic or urological surgery over a 15 day period were included. Solid fasting time, liquid fasting time and anaesthesia start time were recorded.

RESULTS: 101 patients (76 female: 25 male) were included. The average fasting time for solids was 10.1 hours (range 6 to 16.5 hours) and liquids 7.2 hours (range 1 to 16.5 hours). Four patients experienced a liquid fast of <2 hours. 47/101 patients (46.5%) were given a specific fasting time for liquids and had an average fast of 3.8 hours (range 1 to 10.5 hours). In the remaining 54 patients (53.5%) not given a specified fasting time, the average liquid fast was 10.2 hours (range 7 to 16.5 hours). There was no significant difference in fasting times between the specialties.

CONCLUSION: Patients are experiencing prolonged liquid fasts. When a liquid fasting time is specified the average fasting time is more than halved. We have introduced new anaesthetic charts in the department with a detailed prompt for fasting instructions and will re-audit fasting times in 6 months.

Pre-operative Assessment and Patient Preparation -The Role of the Anaesthetist. AAGBI, London 2010 (see: www.aagbi.org/publications/guidelines/docs/preop_2010.pdf)

Communication with relatives - relatively difficult. M McCrea, GG Lavery, Belfast HSC Trust, Regional ICU.

Doctors need to be competent communicators (1) and the General Medical Council states they must be considerate, sensitive and responsive in providing information and support to patients' relatives. The Regional ICU at the Royal Hospitals, Belfast, in its visitor information, states that doctors will be available to relatives each day. We therefore audited the frequency and quality (competency) of doctor – relative communication (D-Rcomm).

Methods: First degree relatives were interviewed between day 5 and 10 of their relatives' ICU stay using a questionnaire based on previous validated work (2,3). They were asked to score aspects of D-Rcomm where 1 = worst possible and 10 = best possible.

Results: Five interviews showed that doctor-relative communication did not occur daily. A sixth, who had been in ICU six days had not yet communicated with a doctor. Relatives rated very highly (median scores 10/10) overall care as well as respect, clarity and completeness of communication. However, empathy was scored poorly (median score 7/10) with 2 out of 5 relatives scoring it as 1/10.

Conclusions: In a small survey, medical communication with relatives scored highly under all headings except empathy. Communication did not occur daily although this was theoretically possible. We intend to extend this audit and focus on the barriers to more frequent communication and the factors leading to relatives' perceptions of lack of empathy.

References

- 1. Gauntlett & Laws Continuing Education in Anaesthesia, Critical Care & Pain 2008 8(4):121 Communication skills in critical care
- 2. Wasser et al CCM 2001; 29(1):192 Establishing the reliability and validity of the critical care family satisfaction survey
- 3. Wall et al Critical Care Medicine 2007; 35(1):271 Refining

the FS-ICU (family satisfaction in the ICU) survey

PONV risk assessment: Survey in a DGH. Ayman Mustafa, Paul Jefferson, David Ball, Dumfries and Galloway Royal Inf.

General anaesthesia is associated with post operative nausea and vomiting (PONV), with an incidence of 30 %. The risk of PONV can be predicted using the Apfel score which identified four risk factors (female gender, non-smoker status, previous history of PONV or motion sickness and opiate requirement post operatively) (1). Patients with 3 or more risk factors are regarded as high risk for PONV and guidelines suggest the use of 2 or more anti-emetics and the use of risk reduction strategies, No prophylactic antiemetic are recommended for low risk patients (2,3). We decided to audit local adherence to these guidelines.

Method: In November 2009, we collected data on 165 consecutive patients undergoing in-patient surgery; for each, Apfel score was calculated and risk reduction was reviewed. Antiemetic treatment was compared to the guidelines.

| Apfel score | 0 | 1 | □□2 | | □□4 |
|-------------|-------------|-------------|--------------|-------------|----------|
| Risk | Low | | Me- dium | High | |
| Patients | 9 (5.4%) | 59 (36%) | 73 (44.%) | 23 (14%) | 1 (0.6%) |

Results. In high risk patients, 6 (25%) cases received appropriate treatment and had risk reduction strategies. Low risk patients received inappropriate treatment in 49 (75%) cases.

Discussion: In our hospital high risk patients appear to be undertreated for PONV prophylaxis despite use of risk reduction strategies. Low risk patients are over treated. We plan to introduce PONV prophylaxis and risk reduction strategies posters in our anaesthetic rooms to improve compliance.

References:

- 1. Apfel CC et al. Risk Assessment of PONV. Int. Anesth. Clin. 2003: 41:13-32.
- Gan TJ et al. Society of Ambulatory Anesthesia Guidelines for management of PONV. Anesthesia & Analgesia 2007;105: 1615-28
- 3. Apfel CC et al. IMPACT: A factorial trial of 6 interventions for the prevention of PONV. NEJM 2004;350: 244-51

The 48 Hour Working Week and Anaesthetic Training: Experience from a District General Hospital. V.Gupta, B.Shelley, Dept Anaesthetics, Hairmyres Hospital.

With the introduction of the European Working Time Directive (EWTD) in 2004 (56 hour week), our department amended the trainee rota to compensate for any potential loss of training. A subsequent audit demonstrated that trainees managed to fulfil service commitments with minimal impact on training. This audit aims to ascertain the impact that Modernising Medical Careers (MMC) and the 48 hour week have made to training.

Methods: Trainee logbooks for 13 weeks following the introduction of the 48 hour week (Aug-Oct 2009) were compared with the same period in previous years: pre

EWTD (2003), pre-MMC / 56 hour week (2004) and post-MMC / 56 hour week (2008).

Results: Post-MMC (2008) and the 48 hour week (2009) the average number of supervised training lists fell by 4% and 2% respectively, solo elective lists increased by 25% and 30%. In 2008 there was a 67% increase in solo non elective case numbers, decreasing by 12% in 2009.

Discussion: These results demonstrate a minimal impact on training and compare favourably with nationally collected data (1). This is in contrast to the predictions of many (2) who feared a negative impact of the changes.

Conclusion: We conclude that it is possible to provide adequate training experience while maintaining service provision within the confines of the EWTD.

References

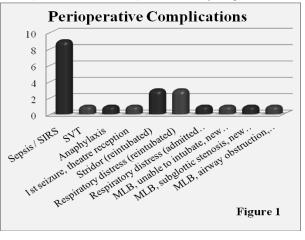
- 1. Liz Shewry. GAT Annual training survey. Anaesthesia News 2009; 267: 17-19
- Spargo PM.UK anaesthetic training and the law of unintended consequences. Cause for concern? Anaesthesia 2005; 60:319-22

Emergency admissions to tertiary PICU from theatre. J Limb (SpR), C Lamb (Charge Nurse), G Bell (Consultant), RHSC, Yorkhill, Glasgow

Unplanned postoperative admissions to intensive care are a clinical indicator of the standard of perioperative care (1) and reflect on mortality and length of stay (2).

Methods. We retrospectively audited 2009 admissions to PICU at Yorkhill. Metavision CIS clinical record was used to identify all admissions within 24 hours of anaesthesia. These records were individually reviewed.

Results. 582 patients were admitted within 24 hours of anaesthesia; 72 were unplanned. An estimated 13000 anaesthetics were performed in 2009 (13241 in 2008). Of the 72 unplanned admissions, 47 were anticipated before surgery, 22 suffered intraoperative deterioration or complication necessitating PICU (figure 1), and 3 were ward discharges but admitted within 24 hours to PICU. Two suffered delayed stridor necessitating intuation after rigid bronchoscopy, and one suffered pulmonary oedema secondary to fluid overload. Anaesthetic factors contributed in 13 admissions (0.1% of all anaesthetics). 8 admissions (0.06% of all anaesthetics) related to airway complications; 7 had



anaesthetic contributing factors (54% of anaesthetic-related admissions).

Discussion. PICU admissions due to anaesthetic complications (0.1% of all anaesthetics) compare favourably to an Australian study in children (0.14%),³ of which 47% related to airway complications. Our audit confirms a low percentage of PICU admissions are related to complications of anaesthesia, whereas the majority relate to patient factors and may be anticipated prior to surgery.

References

- 1. Colvin J, Peden C. *Raising the Standard*. London: Royal College of Anaesthetists, 2005 2e.Section 3.8. Available at: http://www.rcoa.ac.uk/docs/ARB-section3.pdf
- 2. Haller G et al. Validity of unplanned admission to an intensive care unit as a measure of patient safety in surgical patients. Anesthesiology 2005; 103: 1121-9
- 3. Kurowski I, Sims C. Unplanned anesthesia-related admissions to pediatric intensive care a 6-year audit. Pediatric Anesthesia 2007; 17: 575-80

Central venous saturation measurements in critical care patients: comparison of calculated and measured values, and survey of sample processing across Scottish ICUs. S Jeffrey¹, P Jefferson¹, E Bell, DR Ball¹, Depts Anaesthetics & Int Care¹ and Biochem, Dumfries and Galloway Royal Inf.

Mixed venous oxygen saturations $(Sv0_2)$ can be used as a marker for the balance between systemic oxygen delivery and consumption. Central venous saturations $(Scv0_2)$ have been found to change in a parallel fashion under shock conditions¹, and are often used due to easy sampling from central catheters. Goal directed therapy targeting $Scv0_2$ of more than 70% is shown to significantly reduce mortality in patients with severe sepsis and septic shock². $Scv0_2$ is directly measured by cooximetry, or calculated using blood gas analysis (BGA). BGA measures oxygen tension in the sample and $Scv0_2$ is calculated using a standard oxygen dissociation curve.

Our aim was to compare calculated and measured readings of Scv02. With institutional approval, samples from ICU patients were analysed with co-oximetry and BGA in the biochemistry department. We aim to collect 20 samples as a pilot study over January to April 2010. We contacted all 24 ICU departments in Scotland to ask how they process their samples.

Preliminary results indicate BGA underestimates $Scv0_2$, these figures are shown to be statistically significant (P<0.05) using correlation coefficient. Our telephone survey of the 24 units yielded 100% response rate. All units in Scotland use BGA to measure $Scv0_2$ rather than co-oximetry.

We conclude that BGA consistently underestimates $Scv0_2$ compared to co-oximetry. This may have therapeutic implications. $Scv0_2$ results from BGA may be a useful measurement when identifying trends but should be interpreted cautiously when used for goal directed therapy.

REFERENCES

- 1 Marx G, Reinhart K. Venous oximetry. Curr Opin Crit Care 2006;12:263-8.
- 2 Rivers E, Nguyen B, Havstad S *et al.* Early goal-directed therapy in the treatment of severe sepsis and septic shock. *N Engl J Med* 2001; **345**:1368–77.

The adequacy of undergraduate pain training as perceived by FY1 doctors in the West of Scotland. K Fitzpatrick, Victoria Inf, H Du Plessis, Glasgow Royal Inf, G Haldane, Hairmyres Hosp, J McGhie & M Serpell, Western Inf, Glasgow.

Foundation year 1 (FY1) doctors commonly have to manage patients experiencing pain. To treat these patients effectively newly qualified doctors require to have had comprehensive pain teaching at undergraduate level. Despite the International Association for the Study of Pain (IASP) publishing an outline curriculum on pain for medical schools, it has been shown that some pain teaching programmes remain inadequate. This study aimed to assess the adequacy of medical school pain training as viewed by FY1s in the West of Scotland.

Methods: On-line questionnaires were sent by e-mail to FY1s in the West of Scotland in October 2009. Information requested included the quantity and quality of pain teaching at university. Local research ethics committee was consulted but formal submission was not required.

Results: 76 of 338 (22%) FY1s completed the questionnaire, 57% of whom graduated from Glasgow University. The number of FY1 that felt their teaching at university was adequate to manage patients in acute pain was 58 (76%), in chronic pain was 27 (35%), and in palliative pain was 48 (63%). Lower numbers expressed confidence dealing with the following situations: management of acute perioperative pain (32%), management of patients with a history of chronic pain that are in acute pain (18%), and management of terminally ill patients in severe pain (25%).

Discussion: Limited conclusions can be drawn due to the low response rate. However, relatively few FY1s expressed confidence in managing specific types of patient that are in pain, indicating that increased teaching at undergraduate level may be appropriate.

References

- 1. Pilowsky I. An outline curriculum on pain for medical schools. Pain 1988;33:1-2.
- 2. Poyhia R, Niemi-Murla L, Kalso E. The outcome of pain related undergraduate teaching in Finnish medical faculties. Pain 2005;115:234-237.

CUSUM analysis with 95% confidence intervals of ultrasound guided upper limb brachial plexus blocks. K. Fitzpatrick, Victoria Inf, K. Anderson & S. McKinlay, Glasgow Royal Infirmary

CUmulative SUMmation (CUSUM) charts have been used to assess anaesthetists' ability to learn practical skills such as central venous and arterial cannulations¹, intubations², spinals, epidurals³, peripheral nerve blocks and interventional ultrasound. Previous studies have not included the 95% confidence interval (CI) CUSUM lines of the acceptable failure rate. This study used CUSUM analysis with 95% CI to track the performance of a trainee anaesthetist in ultrasound guided upper limb blocks.

Methods: The success and failure of ultrasound guided upper limb brachial plexus blocks was recorded over a period of 7 months. An acceptable failure rate of 10% was chosen. A failure in an awake patient was defined as a block that required supplemental local anaesthetic to facilitate surgery, or in an anaesthetised patient was defined as a block that provided inadequate post operative analgesia. The results were plotted

on a CUSUM graph. The 95% CI CUSUM scores for a success rate of 90% / failure rate of 10% were calculated and plotted on the graph.

Results: 79 upper limb brachial plexus blocks were performed (34 interscalene, 10 supraclavicular, 11 infraclavicular, and 24 axillary blocks). Four blocks were failures (3 interscalene and 1 infraclavicular). The CUSUM line of the brachial plexus blocks remained below the lower 95% CI for a 10% failure rate demonstrating competence.

Discussion: The CUSUM chart is an effective method of demonstrating competence in ultrasound guided upper limb brachial plexus blocks. The addition of 95% confidence intervals illustrates more clearly whether performance is meeting the pre-defined standard.

References

- 1. Runcie C. Assessing the performance of a consultant anaesthetist by control chart methodology. Anaesthesia 2009;64:293
- 2. Fradkin D, Tolhurst-Cleaver S, Palmer J. A learning curve for all: CUSUM curves in initial assessment of competency. RCoA Bulletin March 2009 (pages 13-15).
- 3. Lanigan C, Blanco R. CUSUM scoring: Theory and practice. RCoA Bulletin March 2009 (pages 16-19).

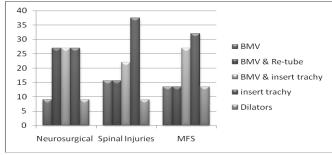
Management of Early Tracheostomy Dislodgement in High Risk Patients: Questionnaire Survey. Z Dempsey (ST5); P Edgar (Cons) Dept Neuroanaesthesia, INS, Glasgow

Tracheostomy displacement accounts for up to 52% of Airway incidents in the ITU, with many patients suffering harm as a result¹. All staff caring for patients with recent tracheostomies should be familiar with the emergency management of this scenario

Methods: Anaesthetic and Nursing staff were given a questionnaire asking them to describe their management of scenarios involving the accidental dislodgement of a recent tracheostomy in a Neurosurgical, Spinal Injuries and Maxillofacial (MFS) patient. Only the MFS patient was specified as having potential upper airway obstruction. Staff were also shown photographs of surgical stay sutures and a tracheostomy introducer, and asked to describe how they could be used.

Results: Most staff questioned would attempt to re-insert the tracheostomy in all three of the scenarios (Table 1). This contradicts the recent ICS Guidelines, which suggest bag mask ventilation (BMV) and re-intubation in patients without expected upper airway obstruction². Half of the nurses and anaesthetic trainees surveyed did not know how to use stay sutures or tracheostomy introducers.





Conclusion: Staff involved in the immediate management of patients with tracheostomies require further training in the management of tracheostomy related emergencies.

References:

- 1. Thomas A and McGrath B. Patient Safety Incidents Associated with Airway Devices in Critical Care: A Review of reports to the UK National Patient Safety Agency. *Anaesthesia* 2009; 64:358-365
- 2. Intensive Care Society. *Standards of Care for Adult Patients with Temporary Tracheostomies*. http://www.ics.ac.uk/icmprof/downloads/ICS%20Tracheostomy%20standards.pdf

Audit of Surgical Pre-Admissions & the Usage of Coagulation Screening - an opportunity to improve patient care and resource utilisation. D Fallaha, ST Anaesthetics, JY Den, C McPhail, D Scheven, FYHOs, Western Gen Hosp, Edinburgh

Coagulation screening ('coag') is one of the pre-operative tests performed in the surgical pre-admissions clinic (PAC) at the Western General Hospital (WGH), Edinburgh. Coags are resource-intensive; a single test in NHS Lothian costs £3.01. In keeping with the available evidence^{1,2}, PAC protocol indicates screening only with liver disease, anticoagulants, alcohol excess or bleeding tendency.

Aims: Spot audit suggested low protocol compliance. Formal audit offered opportunities to raise standards and ensure proper resource utilisation.

Patients & Methods: Colorectal/urology lists Mar-Jun '08 were examined for appropriate/inappropriate coag usage and examined again following intervention Jul-Sept '08.

Pre-Intervention (n=170)

- -129/136 (95%) coags performed not indicated
- -5/7 (72%) coags performed when indicated
- -overall compliance 23% (38/170)

Intervention

Focused on support/training for clinic staff:

- -meeting senior PAC staff with subsequent feedback to clinic staff via internal PAC meetings
- -visual aids prominently placed in clinic
- -coag tubes isolated with informative signs

Post-Intervention (n=144)

- -4/129 (3%) coags performed not indicated
- -5/9 (56%) coags performed when indicated
- overall compliance 90% (130/144)

Discussion: Pre-intervention results suggested virtually routine coagulation screening in the PAC (and inappropriately so). Compliance with protocol increased substantially following intervention (from 23% to 90%), chiefly through a reduction in unnecessary testing. Overall, these results should translate into savings of over £14,000 annually. There may also be a 'lab

morale benefit' from a reduced haematology workload. Finally, work is now underway to establish a Scottish Patient Safety Program process of continuous microaudit within the clinic in order to ensure that these improvements are sustained.

References:

- 1 *The NICE Guidelines:* Pre-Operative Tests: The use of routine pre-operative tests for elective surgery. 5.11: Haemostasis tests. 2003; http://www.nice.org.uk/nicemedia/pdf/Preop_Fullguideline.pdf
- 2 Ng KF et al. Value of predictive coagulation tests: reappraisal of major noncardiac surgery. World Journal

of Surgery. 2002;26:515-520.

Do patients really need PCA pumps after total hip joint replacement? A retrospective analysis of intrathecal diamorphine. Dr.K.Davies, K.Blain, J.Barry, Dr.K.Cranfield, Dr.A.Kamat. Dept Anaesthesia, Woodend Hospital, Aberdeen.

Analgesia after total hip joint replacement is provided by patient controlled analgesia devices (PCAs) at our institution. Absence of on-site out-of-hours anaesthetic cover has deterred use of intrathecal morphine, despite its benefits [1]. This retrospective analysis investigates whether intrathecal diamorphine (0.25-0.3mcg) reduces post-operative analgesia requirements [2].

Methods: Theatre and pain team records were examined for all patients undergoing total hip joint replacement under spinal anaesthesia, between July and December 2009, at Woodend Hospital. Duration of PCA use and morphine requirements were compared for spinals with and without diamorphine.

Results: 132 patients of mean (±SD) age 69±10.4 years were analysed. No group had prolonged PCA use (p=0.287). Intrathecal diamorphine reduced the median total PCA morphine requirements (p<0.001) [table 1].

Methods An online questionnaire survey was sent by email to every anaesthetist in Scotland.

Popular 285 replies were received (Consultants 619/ Sp.Re/ST.

Results 285 replies were received (Consultants 61%, SpRs/ST 3-7 25%, CT/ST1 2-10%, SAS doctors 4%). Half of all respondents stated that elective patients in their hospital were given written information prior to admission. 82% of anaesthetists stated that in their hospital the same anaesthetist who visits the patient preoperatively then delivers the anaesthetic. Only 4% of anaesthetists document that the patient has read and understood the information provided. Nearly a third of anaesthetists (32%) regularly see patients in preoperative assessment clinics and only 4% conduct assessment in the anaesthetic room.

Conclusion This survey demonstrates that some of the recommendations regarding the consent of patients for anaesthesia are not being met in Scotland. Many patients do not receive written information prior to admission and anaesthetists rarely document that this information has been read and understood.

References

Edinburgh.

- 1. Association of Anaesthetists of Great Britain and Ireland. Consent for Anaesthesia. 2006
- NHS Quality Improvement Scotland, Anaesthesia Project Group. Anaesthesia – Care Before, During and After Anaesthesia. NHS QIS, Edinburgh July 2003

3. Royal College of Anaesthetists.
Clinical Audit and Quality of Practice in Anaesthesia. June 1994.

Discussion: Addition of diamorphine to spinal anaesthesia for post-operative analgesia after total hip joint replacement is beneficial. PCA devices may become unnecessary if intrathecal diamorphine becomes popular for our total hip joint replacements.

References:

quirement (mg)

- 1. Fischer H.B.J, Simanski C.J.P. A procedure-specific review and consensus recommendations for analgesia after total hip joint replacement. *Anaesthesia* 2005;60:1189-1202
- 2. Wrench I.J, Sanghera S. Dose response to intrathecal diamorphine for elective caesarean section and compliance with a national audit standard. *International Journal of Obstetric Anesthesia* 2007;16(1):17-21

Consent for Anaesthesia in Scotland. Carol Gray, Andrew Clark, Brian McCreath, Western Infirmary Glasgow

The right to give and withhold consent is a basic principle of healthcare and a fundamental right. Recommendations regarding consent include:

written information should be provided pre-operatively. 1,2 the anaesthetist who is to give the anaesthetic should visit the patient before the operation. 2,3

discussions should be recorded in the patient record. 1,2,3 new information should not be provided in the anaesthetic room. 1

The aim of this study is to determine whether these recommendations are being met in Scotland.

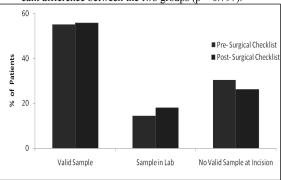
Safer Surgery Checklists - a Self-

Fulfilling Prophecy? BM Schyma, J Morton, Dept of Anaesthesia, Western General Hospital,

The move to 'day of surgery admission' has led to new challenges in ensuring blood availability for major surgery. This can be particularly challenging in hospitals which, like our own, operate a seven-day validity window for pre-operative "group and save" samples when pre-assessment often occurs more than seven days prior to admission. Error in this process may have serious consequences should a patient bleed at operation

A surgical safety checklist aids in the reduction of morbidity and mortality and has been implemented in our hospital. Our

Fig 1: Comparison of Validity of G&S samples in the pre- and post- checklist groups. There was no significant difference between the two groups (p = 0.797).



locally modified checklist includes an item which questions the current validity of a patient's G&S sample prior to induction of anaesthesia. This retrospective study investigates whether the inclusion of this item has had an impact on blood availability in women undergoing major breast surgery. Patients requiring a G&S were identified over an 8 month period and the presence and validity of this sample at the time of incision was deduced. The surgical checklist was introduced at the beginning of the latter four months.

30.4% of the pre-checklist group had neither a valid sample nor a sample pending completion of processing at the time of incision. In a further 14.5% of cases a sample was undergoing processing in the laboratory and was thus not yet valid. Implementation of the surgical checklist wasn't associated with a significant reduction in these numbers (Fig 1, p 45). These results illustrate some of the key challenges in implementing a novel surgical checklist and ensuring it has a positive impact on patient safety.

A Retrospective Comparison of Transversus Abdominis Plane Blocks with Standard Analgesia for Abdominal Surgery in Hairmyres Hospital. Kearns R, Fitzpatrick K, Ramage K, Haldane G, Dept Anaesthesia, Hairmyres Hospital

Abdominal surgery is associated with significant post-operative pain. Transversus Abdominis Plane (TAP) block provides a means of sensory blockade of the abdominal wall in patients unable to have epidural analgesia due to clinical or resource related factors^{1,2}. We examined the analgesic efficacy of TAP blocks during the first 24 hours after abdominal surgery.

Methods: Data from Hairmyres' Acute Pain database was analysed from January 2007 to September 2009. Patients who received TAP blocks were identified and compared with controls receiving PCA morphine. Data was analysed using a Microsoft Excel spreadsheet.

Results: 184 patients in each group were identified. Numbers

| | TAP (n=184) | PCA (n=184) |
|--|-------------|-------------|
| Mean age (years) | 58.6 | 55.7 |
| Median Cumulative Pain Score (24 hr period) | 6/24 | 6/24 |
| Mean morphine 1st 24hrs | 35.9mg | 33.8mg |
| Severe pain | 17 (9%) | 14 (7.6%) |
| Mean Px satisfaction score | 1.16 | 1.14 |

of upper, lower GI and laparoscopic procedures were equal in each group. Adjuvant analgesic use was similar in each group. Results are tabulated below

Conclusion: This audit was unable to show that TAP blockade provides superior analgesia to PCA morphine for abdominal surgery in this hospital. This contrasts with published data³. Despite its limitations, this audit emphasises the importance of evaluating the efficacy of any new intervention at local level, no matter how promising published data may appear. We plan to commence a period of staff re-education followed by a period of more extensive data collection (anaesthetist grade, pre-existence of chronic pain, and opiate use). Data will be re-

evaluated to assess effects of these changes.

References

- 1. O'Donnell BD, McDonnell JG, McShane AJ. The transverses abdominis plane (TAP) block in open retropubic prostatectomy. Reg Anesth Pain Med: 2006;31:91.
- 2. McDonnell JG, O'Donnell B, Curley G, et al. The analgesic efficacy of transversus abdominis plane block after abdominal surgery: a prospective randomised controlled trial. Anaesth Analg 2007;104:193-7
- 3. Carney J, McDonell JG, Ochano A, Bhinder R, Laffey JG. The Transversus Abdominis Plane Block Provides Effective Postoperative Analgesia in Patients Undergoing Total Abdominal Hysterectomy. Anaesth Analg 2008; 107: 2056.

Do surgical safety checklists make obstetric patients anxious? RJ Kearns, V Uppal, J Bonnar*, EM McGrady, Princess Royal Maternity Unit, Glasgow, *Dept Anaesthesia, Ninewells Hospital, Dundee

Providing safe, procedurally robust peri-operative care is a fundamental goal of any surgical team. Surgical safety check-lists are shown to improve teamwork, safety and efficiency^{1,2}. In keeping with National Patient Safety Agency guidance³, we introduced a checklist for elective caesarean sections (LSCS). Such patients are usually awake and pre-operative anxiety is common. Effects on patient anxiety were examined.

Methods: Local ethics committee deemed formal approval unnecessary. Patients undergoing elective LSCS from August to November 2009 were asked 3 questions regarding the checklist. Responses were recorded as yes or no for the first question, and with a Likert scale for the subsequent 2 questions.

Results: 58 randomly selected patients were asked: "Did you notice the checks performed before and after your operation?" 45 patients (75%) remembered, 11 patients (19%) remembered when prompted, and 2 (3%) did not remember. The 56 patients who recalled the checks were asked a further 2 questions; "If I

said the checks made you worried, how would you reply?" All patients disagreed or strongly disagreed. "If I said the checks were reassuring, how would you reply?" 52 patients (93%) agreed or strongly agreed, and 4 patients (7%) neither agreed nor disagreed.

Conclusion: One argument against using surgical safety checklists is a concern that patients may find it worrying. Our results suggest that though most patients are aware of the checks, they do not find it concerning and may find it reassuring. Perceived effects on patient anxiety should not constitute a reason to abandon surgical safety checklists.

References

- 1. Lingard L, Regehr G, Orser B et al. Evaluation of a preoperative checklist and team briefing among surgeons, nurses, and anaesthesiologists to reduce failures in communication. Arch Surg 2008;143:12-7
- 2. Nundy S, Mukherjee A, Sexton JB et al. Impact of preoperative briefings on operating room delays: a preliminary report. Arch Surg 2008; 143:1068-72
- 3. National Patient Safety Agency. Patient safety alert. WHO surgical safety checklist 2009. www.npsa.nhs.uk/nrls/alerts-anddirectives/alerts/safer-surgery-alert/

Uptake of H1N1 vaccination by theatre and critical care staff. Black E, May A, Jack E, Dept Anaesthesia, Stirling

Royal Infirmary, Stirling

The Scottish Government identified health care staff as a priority for H1N1 vaccination. This survey was conducted to provide a snapshot of uptake, reasons for declining and strategies to increase rates.

Methods: We conducted the survey after the vaccination target week for theatre and critical care staff. Staff were interviewed individually and asked standardised questions. The only identifying features of the data were area of work and profession.

Results: Of 107 staff interviewed, consent was retrospectively withdrawn by the local theatre manager on behalf of theatre nurses and so 43 responses were discarded. Of 64 remaining staff; 15(24%) had been vaccinated and 9(14%) intended to get vaccinated. Of the 40 unvaccinated staff only 8(20%) had read the information on the hospital intranet whilst 25(64%) based their decision to decline on discussions with colleagues. 9 (23%) reported that the general press had influenced their decision and another 9(23%) based their decision on no information at all. The majority, 25(63%) of unvaccinated staff cited fear of side-effects or safety as the reason for declining. 23(56%) of the 40 staff not intending on being vaccinated may have changed their minds if more information was made available.

Conclusion: 38% vaccination rate compares poorly to nation-wide estimates of 51.5% in healthcare staff. This data suggests that vaccination was thought to be risky and decisions are strongly influenced by colleagues. Over half of those not vaccinated would reconsider if more information was delivered to them.

Cardiac Arrest...where? J Watters, S Thompson, Dept Anaesthetics, Royal Infirmary of Edinburgh

The Confidential Enquiry into Maternal and Child Health sets an audit target that 100% of cardiac arrest team members 'know where the maternity unit is and how to gain immediate access to it' (1). All maternity areas at the Royal Infirmary of Edinburgh are housed within the Simpson's building.

Methods: We designed a form that included a map of each floor of the hospital. All current cardiac arrest team members were asked to mark several locations, both maternity and gen-

Cardiac Arrest Team members that Correctly Identified 100 Clinical Area 100 88.8 85.2 81.5 80 593 57.4 **\$** 60 Percent 40 20 0 HOU/Ward116 Simpsonward 119 Labour Ward Simpsonward 211 Ward 106 Ward 203 Clinical Areas

eral, on the map without using any reference materials.

Results: There were 61 people currently working on the cardiac arrest team. 54 (89%) returned correctly completed forms. Overall the ability to locate maternity areas was poor. Variation amongst staff groups was apparent with only 20% (1/5) of CCU SHO's and 25% (6/24) of ALS trained nurses correctly identifying all 3 maternity areas, compared to 75% (6/8) of anaesthetic trainees

Conclusion: We are currently failing to meet the target of 100% of cardiac arrest team members being able to find the maternity areas. Particular staff groups require focused orientation to the location of the maternity areas.

References

1. Lewis G (ed) 2007. Saving Mothers Lives: reviewing deaths to make motherhood safer - 2003-2005. London: CEMACH.

Foundation Doctors' Knowledge of NHS Tayside Blood Transfusion Guidelines. Adeline Gong, May Mok, Perth Royal Infirmary

Foundation doctors (FDs) frequently prescribe blood and blood components, therefore they all should have correct knowledge of the local blood transfusion guidelines. If their knowledge is inadequate, measures should be implemented to improve it.

| | 1 st cycle | 2 nd cycle |
|---|-----------------------|-----------------------|
| Tayside BTS guidelines | 9% | 82% |
| Cross-matching before elective procedures | 70% | 72% |
| Blood components transfusion | 13% | 23% |
| Emergency blood issue | 57% | 73% |
| Management of transfusion reaction | 30% | 50% |
| | | |

Table 1: Percentages of PRI FD1's showing correct knowledge of blood transfusion issues.

AIM: 1-To assess FDs' knowledge on blood and blood components transfusion, 2 -To increase knowledge of local blood transfusion guidelines

METHOD: FDs at Perth Royal Infirmary (PRI) were given questionnaires between 24th – 31st August 2009 assessing their knowledge on local blood transfusion guidelines¹, cross-matching requirement before elective surgery, blood components transfusion, emergency blood issuing and management of transfusion reactions. Results were analysed. Measures such as ward posters, blood transfusion tutorials and NHS Tayside intranet links were implemented to improve knowledge. FDs were reaudited using the same questionnaires between 9th -16th November 2009.

RESULTS: 23 and 22 FDs took part in the first and second cycle of the audit respectively (Table 1).

CONCLUSION: Education improved FDs' knowledge on blood transfusion in all areas, most noticeably in knowledge of BTS guidelines.

REFERENCES:

1. NHS Tayside and East of Scotland Blood Transfusion Centre Clinical Use of Blood and Blood Components Policy. (Document CL/30 updated November 2007).

Induced hypothermia in comatose survivors of out of hospital cardiac arrest (OOHCA): Retrospective audit of practice and outcome. Dr Prabodh Sasidharan, StR, Aberdeen Royal Infirmary

Impaired neurological function remains a major contributor to mortality. Induced hypothermia has been proven to improve neurological outcome and reduce mortality (level 1 evidence) and mild hypothermia has been integrated into resuscitation guidelines. With this background this retrospective audit was carried out in Raigmore Hospital ICU analysing OOHCA admissions for therapeutic cooling, looking at standard of practice against existing guidelines and analysing outcome and burden on ICU resources.

| Patient characteristics | Age in years (Mean) 56 | | |
|-----------------------------------|---|------------|--|
| | Male sex no /total no (%) | 14/17 (82) | |
| Cause of arrest | MI 53% | | |
| | Primary dysrythmias | 47% | |
| Cooling data | Time from ROSCto initiation of | 3(2-5) | |
| Time in hrs (Median/interquartile | cooling | | |
| range) | Time from ROSC to target temp | 7(4.7-8) | |
| | Duration of cooling | 17(12.5- | |
| | | 26.5) | |
| ROSC = return of spontaneous | Duration at target temp | 14(10- | |
| circulation | | 23.5) | |
| Favourable outcome (survival | 58% vs. 55%(European trial) 49% (Australian | | |
| with minimal neurological se- | study) | | |
| quel) | | | |
| ICU stay | Range (Days) 1-8.7 | | |
| | Mean (Days) 2.5 | | |
| Compliance with standards | Duration of target temp (33-34) | Compli- | |
| | Standard 12-24hrs | ance 58% | |
| | | | |
| | Time to achieve target temp | 4-9.5 | |
| | (Standard: Ideally 4hrs) | | |

Table 1. Induced hypothermia and OOHCA.

The data was obtained retrospectively over a 2 year period from May 2007-June 2009. The primary aim was to determine cooling data, outcome and ICU stay. The results (Table 1) were analysed and aspects of care which needed improving were identified. Introduction of a therapeutic hypothermia clinical pathway to achieve the cooling target was proposed as a change of practice.

References

1. Holzer M. The Hypothermia after Cardiac Arrest Study Group. Mild therapeutic hypothermia to improve the neurological outcome after cardiac arrest. New England Journal of Medicine 2002; 346: 549–56.

Audit of peri-operative hypothermia at a regional neurosurgical referral centre. L Robertson, A Rae, C Urquhart, A Calder, EJ Walker, P Edgar, Dept Neuroanaesthesia, INS. Hypothermia is defined by NICE as a core temperature less than 36°C. Hypothermia has negative effects on oxygen requirement, myocardial function, coagulation, wound healing and post-operative outcome. NICE highlighted the importance of avoiding inadvertent peri-operative hypothermia in their 2008 guidelines (1). A previous retrospective audit at our institute revealed post-operative hypothermia in 31% of patients anaesthetised for drainage of a sub-dural haematoma. Our aim was to prospectively audit the incidence of post-operative hypothermia in all patients undergoing surgery at our centre.

Methods: We conducted a two week prospective audit of first recorded post-operative temperature in patients undergoing surgery at a regional neurosurgical referral centre.

Results: Data was collected for 129 patients who underwent surgery at our centre during the two week period. 45/129 were Oral and Maxillofacial Surgery (OMFS) patients and 84/129 were Neurosurgical. 58/129 patients (45%) had initial post-operative temperatures <36°C - 42% of OMFS patients and 66% of neurosurgical patients. 21/129 patients (16%) left the theatre complex outwith normal recovery room hours (8am-9pm). 38% of patients recovered out of hours had tempera-

tures <36°C compared to 46% of patients recovered in hours

Conclusions: A significant proportion of patients were found to have perioperative hypothermia. Neurosurgical patients are at increased risk of hypothermia for several reasons and relative hypothermia is an established technique in neuroanaesthesia. In this audit however nonneurosurgical patients were just as likely to be hypothermic as neurosurgical patients. This suggests that the OMFS patients may be adversely affected by being operated and recovered in the same area.

References

1. National Institute for Clinical Excellence, April 2008. NICE Clinical Guideline 65: Inadvertent perioperative hypothermia: The management of intraoperative hypothermia in adults.

Epidural vs. Fascia-iliacus block in elective Orthopaedic hip surgery in children. Dr J Currie, CNS M McCulloch, Dr A Rae RHSC, Glasgow.

A change in technique by the primary investigator gave the perception that fascia-iliacus block is as efficacious as epidural analgesia and led to a reduced length of stay. We carried out a retrospective audit of case notes to evaluate this.

Methods: After approval from the hospital audit/ R&D department we began case finding using the departmental pain database. The 2 groups were case-matched based on procedure and age. Case notes were retrieved and data gathered onto audit forms. Data for pain scores (0-3) was drawn from the hospital CEWS forms and charted for the period of 48 hours post-operatively.

Results. Each study group contained 28 patients. Data was unavailable for one patient in the Epidural group.

Conclusion: Our data show a small trend towards shorter stay in the epidural group, the opposite of our perception. Pain

| | Epidural Group | Fascia-iliacus Group |
|---|----------------|-------------------------|
| Days stay – range (average) | 2-9 (2.8) | 1-8 (3.2) |
| Patients total pain score >5 | 6 | 0 |
| Patients total pain score <5 (0 throughout) | 21 (9) | 28 (14) |
| No of pain assessments – range (average) | 20-48 (39) | 4-26 (12) |

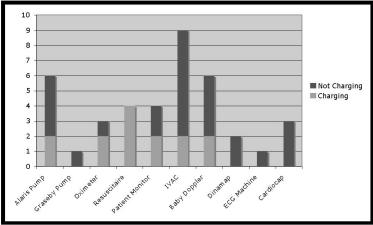
scores were cumulatively lower in the fascia iliacus group but based on fewer observations. Routine use of post-operative pain scoring charts in the fascia iliacus group may facilitate increased assessment of pain scores postoperatively. We suggest the implementation of the routine use of such charts for these patients.

Audit of pre-generator testing preparation. SC Rowell, KM Howie*, J Reid, Depts Anaesthesia, Queen Mother's Hospital, *Southern General Hospital, Glasgow

A generator test in May 2006 at a paediatric and maternity unit in Glasgow proved problematic. The generator failed and staff scrambled to deal with the consequences. The first patients were being transferred into theatre and a child was on bypass (which was hand pumped until resumption of mains power). Despite the potential for serious harm there were no casualties. Regular tests are now carried out.

Method: We decided to audit testing preparation to see if lessons had been learned. We looked at charging of pumps and monitors prior to testing. These rely on battery power in the event of mains failure. All clinical staff had been notified in advance of the test as normal.

Results: Less than 30% of pumps and 50% of other equipment including monitoring were charging prior to the generator test.



Conclusion: Difficulties could be encountered in the event of power failure due to a lack of charged equipment. Reasons may include lack of knowledge of issues and solutions during testing and lack of communication between engineers and staff highlighting potential local problems. It is not enough to announce the date of testing. Communication between departments is vital to plan for and hopefully avoid deleterious consequences. Written test procedures could provide a framework to

ensure quality preparation and safe testing procedures. Drills to familiarise staff with failure procedures may improve performance in this area (1).

Reference:

1. Stymiest DL. Managing hospital emergency power testing programs. American Society for Healthcare Engineering of American Hospital Association.

Warming Of Orthopaedic Irrigation Fluid In Scotland. GM Cowan and J Crawford, Dept Anaesthesia, Southern General Hospital, Glasgow.

The Perioperative stream of the Scottish Patient Safety Programme has made the prevention of peri-operative cooling of patients a priority (1). In our hospital, irrigation fluid to be used in orthopaedic surgery is currently not warmed before use and consideration was being given to doing so. NICE has published a blanket recommendation that all irrigation fluid should be warmed in a cabinet before use (2), but does not address specific types of surgery or anaesthesia. We decided to find out if other hospitals in Scotland were following this guidance in orthopaedic surgery.

Methods: We undertook a survey of Scottish Hospitals by telephoning the orthopaedic theatre in each hospital and asking whether they routinely warmed the irrigation fluid used in orthopaedic surgery.

Results and Discussion: We were able to get an answer from all 21 Scottish hospitals that we telephoned. 9 hospitals said that they did warm irrigation fluid, 10 said they did not, and 2 said that they sometimes warmed it.

Conclusion: Based on the practice of units in Scotland, there is no clear consensus about whether irrigation fluid should be

warmed prior to its use in orthopaedic surgery, despite a recent guideline that suggests this should be done.

References:

1. Scottish Patient Safety Alliance http://www.patientsafetyalliance.scot.nhs.uk/

2. CG65 Perioperative hypothermia (inadvertent), National Institute for Clinical Excellence. Apr 2008.

Tomorrow's World. National Clinical Governance Meeting

Lee Riddell, SpR Anaesthetics, Glasgow Royal Infirmary, Glasgow

I felt lucky to attend this meeting in March, firstly because I stumbled upon it by accident while doing research into hospital acquired infections, and secondly because it had a fantastic ensemble of eminent speakers. Run by NHS Quality Improvement Scotland (QIS) at the Hilton Hotel in Glasgow, with the Deputy First Minister making an appearance this was set to be quite a day.

Clinical Governance, that topic we've all memorised a text book answer for, or an example for our exam or job interview, something that we champion in every part of our working lives. Yet dig a little deeper and most trainees would struggle to tell you that QIS was one of the Special Health Boards, providing support to NHS Scotland. Fewer still would pinpoint its role to translate the latest scientific research, expert opinion and patient experience to help improve the quality of healthcare, or that the Healthcare Environment Inspectorate, Scottish Health Council and SIGN are key components of the organisation. Whether your Consultant colleagues are better informed I will leave to your discretion. Clinical

Nicola Sturgeon, Deputy First Minister



governance is what our practice is based upon, yet there is little or no exposure as a junior trainee on its place in NHS Scotland, or the complex web of institutions responsible for its basis and implementation.

The morning started with a cup of strong black coffee and an interesting conversation at the NHS Education for Scotland (NES) stand. They were advertising their recent NES Patient Safety Multidisciplinary Steering Group briefing (which can be viewed on their website www.nes.scot.nhs.uk). Then in to join Sir Graham Teasdale (Chairman QIS) with his softly spoken and very warm welcome.

A quick scan of the delegate list confirmed what a slow sweep of the art deco ballroom of the Hilton had suggested; yes, I was the only medical trainee in the room. Of the almost 300 attendees that included clinical governance managers, risk managers, senior medical and nursing staff, chief executives and others, I found it strange that no other medical trainees were in attendance.

Nicola Sturgeon (Deputy First Minister and Cabinet Secretary for Health and Wellbeing) was next to the podium. Her uplifting, patriotic call to arms in the fight for improvement and excellence in Scotland's health-care system showed her in a light I've never experienced before. I lost count of the number times she used the word "SCOTLAND", inflecting her language as if rousing an army before her. The audience was suitably rallied for the day ahead.

We then heard from Professor Phil Hanlon (Professor of Public Health, Glasgow University), with an energetic, enthusiastic and interactive session skipping through the health issues of 200 years ago to those we expect to see

50 years from now. The advances and pitfalls we've seen in health improvements over the years, and the difficulties we're likely to face through the 21st century, highlighting the main issues as an ageing population, dementia, obesity and mental health.

A well earned break followed and a chance to investigate the many stalls surrounding the coffee and Danish pastries. NES I have already mentioned. Health Protection Scotland (www.hps.scot.nhs.uk) are charged with protecting us from infectious and environmental hazards. They provided an opportunity to embarrass myself with my poor hand washing technique, as revealed under their UV light. The Institute of Healthcare Management (www.ihm.org.uk) is an independent organisation aiming to meet the develop-

mental needs of NHS managers. Information Services Division (www.isdscotland.org) was showcasing Navigator, a web-based information tool with user-friendly access to comparative information to help review, monitor and plan healthcare services and support quality improvement. SIGN were there advertising "ROCKET", its web based summaries that allow you to quickly click your way through the clinical content of a guideline to the specific piece of information you need (www.sign.ac.uk/guidelines/published/rockets.html). Finally, QIS had their own stand offering plenty of helpful information and leaflets on all aspects of their role and current interventions (www.nhshealthquality.org).

Following coffee we heard from Dr Sarah Fraser (Director of Sarah Fraser and Associates Ltd). Though running her own Consultancy Company now, she does have extensive experience of the NHS and is well known for her work on how good practice spreads. Her fast-paced style, inspiring words and selfless dedication to improvement shone through; the audience was riveted. She guided us through the complexities of change in a large organisation and the problems faced (with specific reference to the NHS), before discussing some of the strategies and innovations that have been successful, and hold promise for the future.

A tasty hot and cold buffet followed. 17 posters were on display, covering three main areas; Healthcare Associated Infections, Patient Safety and Suicide Review, with representation from all of Scotland's health boards. They were all innovative and stimulated plenty of debate. Parallel smaller group workshops were well placed after lunch to keep one's attention in our post-prandial hour. I opted for the patient safety workshop.

This pitted our very own Dr Malcolm Daniel (Consultant in Anaesthesia and ICU at Glasgow Royal Infirmary) and team against a team from Dumfries, and was adjudicated by Dr Sarah Fraser. Dr Daniel and his team were presenting their work into decreased ventilator-associated pneumonia relating to the implementation of a ventilator bundle and a daily goals sheet to improve the reliability of this. Followed by the improved pain scores they managed to achieve implementing an acute pain pathway for elective orthopaedic patients, with a similar method for improving reliability. The team from Dumfries had implemented several steps to improve the reconciliation of patients' medicines in 2 separate wards of the hospital. In an approach new to me, the GRI team presented the Dumfries team's research and vice versa. This was followed by an open-floor question and answers session, and finished with both teams reflecting on their achievements, what might have been done differently, and what's in store as they aim to roll out their changes.

The final speaker of the afternoon was Prof. June Andrews (Director of Dementia Services Development Centre, Stirling University). Her witty anecdotes and hilarious stories kept us entertained as she navigated us through the perils of dementia, an ageing population and the massive cost implications dementia care has and is going to represent over the coming decades. The improvements implemented in Stirling over recent years have not only made services there more efficient but of better quality; end points we all aspire to.

The day was brought to a close by Dr Frances Elliot (Chief Executive QIS). Her words looked to the future particularly with the pending change of QIS to HIS, Healthcare Improvement Scotland, and its new role. Following the Crerar Review in 2008, HIS will be charged with providing public assurance on service quality, holding councils and service providers to account and targeting support for service improvement. Over time, they will allow people who use services, their carers and the wider public to see and experience further significant improvement in the quality of services. While making reference to all the days' speakers, she reinforced the complex challenges the NHS is going to face over the coming years and the aims and aspirations laid out by QIS/HIS to push the NHS forward. Dr Elliot finished by talking about the NHS Scotland Quality Strategy and Care Governance, and how these would be used to create a high quality person-centred, clinically effective and safe healthcare service, that would be recognised as world-leading in its approach.

The day delivered more than I ever expected. It was a wonderfully diverse meeting and highlighted a number of issues, organisations and people I'd never encountered before. Meetings on topics of this nature are not well advertised within the division of anaesthesia, particularly to trainees. And yet I can't believe there is an anaesthetist in the UK who would not have learned and benefited from, not to mention enjoyed, this meeting. In today's climate of government debt, cost cutting and NHS financial targets plus high public expectations, these issues are key to all our clinical practice.

I will leave you as Dr Elliot left us on the day. If we are going to implement change, if we're going to improve both the quality and efficiency of the NHS, if we're going to improve patient experience and outcome, it's down to us. In the words of President Obama:- "do not wait for others, we are the ones we've been waiting for"

Obituaries

Kenneth Clark Grigor

Dr Grigor, who died in May 2010 at the age of 95, was one of the last remaining anaesthetists whose careers began when the standard techniques available were "open chloroform, ethyl-chloride and ether, gas-oxygen and ether, and spinal analgesia", (quoted from his Presidential Address to the Scottish Society of Anaesthetists in 1970). At the end of his career, he was using the most advanced technology for anaesthesia for cardiac surgery.

Kenneth Clark Grigor was born in Fortrose, Easter Ross in 1914. He was educated at Fortrose Academy and began his medical training at Glasgow University at the age of 17, having never been further from home than Inverness and Tain. He graduated MB ChB in 1937 and became House-Physician at East Fortune Sanatorium, East Lothian, and then House-Surgeon at the Southern General Hospital, Glasgow in Mr Willie Rankin's Unit. During this latter post, Mr Rankin told his young resident what anaesthetic to use for each case, either chloroform or spinal. Mr Rankin had done all the spinals himself until Dr Grigor became experienced.

When this appointment came to an end, he was appointed Trainee Anaesthetist at the Southern General in 1939, and a year later at the age of 26 he became 'Anaesthetist' to the Glasgow Corporation Hospitals, which included Stobhill General Hospital, Oakbank Hospital, Ruchill Hospital and the Southern General. His clinical commitments for seven years were to the Southern General and to the Thoracic Surgical Unit at Ruchill. This was his first exposure to anaesthesia for chest surgery, which was to become his major clinical interest for over 30 years.

After two years as Specialist Anaesthetist in the RAMC from 1947-49, at the rank of Major, he became Senior Anaesthetist at the Cardio-

Thoracic Unit at Mearnskirk Hospital, Glasgow, one of only two such units in the West of Scotland, and in 1950 Consultant Anaesthetist at the Victoria Infirmary, Glasgow. For the next 30 years, he devoted his clinical skills to anaesthesia for cardiac surgery, as part of a dedicated multidisciplinary team under the energetic leadership of Mr Bert Barclay. Dr Grigor's MD thesis, awarded with high commendation in 1952, analysed the causes of post-operative lung collapse. In 1953 he was elected Fellow of the Faculty of Anaesthetists.

When Dr John Dundee published his first results using hypothermia for cardiac surgery in 1953, Dr Grigor went immediately to Liverpool to learn the technique, and began a life-long friendship with Dr Dundee. He also went to Amsterdam to see how Professor Brom managed a similar technique. In 1957 Dr David Melrose introduced his revolutionary heart-lung bypass pump, and again Dr



Grigor went south, this time to the Hammersmith to learn from the inventor how to manage it. Both these new techniques were historic advances in medicine, allowing cardiac surgeons a considerably longer operating time, and enabling more complex procedures to be undertaken. He showed courage, initiative and determination in taking on the responsibility for their introduction at Mearnskirk

His appointment in 1969 as Consultant-in Charge of anaesthetic services at the Victoria Infirmary and Associated Hospitals, was pivotal in improving clinical and academic training for junior anaesthetists. He insisted on their attendance at new inhouse tutorials, and at regional post-graduate courses, and he arranged secondments to other hospitals for specialist experience. It is hard to believe that he encountered considerable resistance and hostility from some of his senior colleagues and it tested his resolve to push through these initiatives, which were essential if the department was to achieve Faculty recognition of its training programmes.

In 1956 he set up a Pre-anaesthetic clinic, perhaps the first in Scotland, to assess patients' suitability for surgery, and to supervise their management until they were deemed fit.

In 1970 he was given Honorary Fellowship of the Royal College of Physicians and Surgeons of Glasgow.

In 1946, aged 32, he was one of the seven Glasgow Anaesthetists who met to found the Glasgow and West of Scotland Society of Anaesthetists. They were Dr Keir Fisher and Dr Alex Forrester of the Royal Infirmary, Dr Tony Pinkerton and Dr Andrew Tindal of the Western, Dr Iain Dewar and Albert Christie of the Victoria, and Dr Kenneth Grigor of the Corporation Hospitals. This meeting was instigated by Dr Pinkerton, who wanted to put an end to the destructive rivalry which had evolved between anaesthetists in the different hos-With utmost diplomacy and farsightedness, he suggested forming a Society, whose members would meet to exchange clinical experiences and to socialise. Dr Grigor was entrusted to get the Society off to a good start by arranging the first meeting, at the Southern General. Five papers were presented on a variety of topics:- splanchnic blocks, continuous spinal analgesia, cyclopropane, anaesthesia for tonsillectomy and post-operative lung collapse treated by bronchoscopy, the last two being presented by Dr Grigor himself. Thirty-five anaesthetists attended, it was a huge success, and the Society was up and running. He became its President in 1957.

He was elected President of the Scottish Society of Anaesthetists in 1970, the year in which its members undertook a unique visit behind the Iron Curtain to Poland to join the Polish Society at scientific meetings in Warsaw, Poznan, and Krakow. He was a charismatic leader, presenting papers at two meetings, and leading by example in all the social and convivial sessions, the perfect ambassador for Scottish anaesthesia.

During that trip, the coach transporting the 28 travellers broke down in the middle of nowhere during the long journey south to Krakow. After an hour or so waiting in the cold bus, and with no sign of help arriving, the mood in the bus began to deteriorate. Dr Grigor, sitting in the back seat, produced a bottle of whisky, quite possibly an imprisonable offence in a communist country. Measures were dispensed, a prolonged sing-song developed, and tales were told, notably by Donald Campbell, Jimmy Kyles, and Leslie Baird. Time passed quickly, the day was saved, and the rescue bus arrived too soon. The story would have been even better if it was known that the bottle in question had been Glenmorangie. No-one can remember

Dr Grigor loved conversation especially if it developed into debate, and even more if it was accompanied by a dram. He loved poetry, and even in his nineties could recite flawlessly most of Burns major works, especially 'Tam O' Shanter and Holy Willie's Prayer. He learned Gaelic to Higher level in his sixties, and was never slow to corner anyone who was identified as a native speaker; he claimed that his Black Isle accent was conducive to faultless pronunciation. All these verbal attributes were accomplished despite a stammer, a life-long affliction which never restrained him from stating his views forcibly, or

discharging a telling punchline. He loved golfing at Killermont, and farming at Fortrose. He only got grumpy when trying yet again to give up smoking, a habit he only conquered long after retirement.

He was very close to all his family, and loved nothing better than to organise the annual clan gatherings. He was immensely proud of his three sons, ten grandchildren and thirteen greatgrandchildren. He was predeceased by his oldest son, his oldest grandson, and his adored wife of 60 years, Netta, who died in 2000.

Dr Grigor was a dedicated doctor, with an old-fashioned re-assuring bedside manner. He was determined to achieve his goals, and had a fierce sense of fairness and justice. He was unswervingly loyal to his friends and colleagues, to the Victoria Infirmary, and to the NHS. He made major contributions to the specialty of anaesthesia, especially for cardiac surgery. Those of us who worked with him and under him were greatly privileged.

Alan Macdonald

Alastair H B Masson

Alastair Masson's involvement with Anaesthesia started virtually by accident when, during his National Service, he was posted to RAF Mauripur, a small base in Pakistan, and deputed (i.e. ordered!) to be the anaesthetist when a surgical emergency occurred. The patient survived, as did two others, so that he was seen as the 'natural' replacement as the anaesthetist at the parent base of Habbaniya in Iraq when the incumbent was posted back to the UK. So began a career which extended from this self-taught beginning to solving the problems of the introduction of cardio-pulmonary bypass for open heart surgery. During that career he was a strong supporter of our Society: he rarely missed a meeting; was one of the earliest winners of the Registrar's Prize (1955); and later served as both Honorary Secretary (1963-7) and President (1978-9).

During his time as Honorary Secretary he gave a presentation on his experiences (social and medical) gained from a year spent in the US (Dallas, Texas), noting that 47% of surgery was performed between the hours of 7pm and 7am, that a car was an essential requirement of daily life, and that air transport was already the primary mode of long distance travel. Perhaps this latter experience encouraged him to organize a very successful Society tour of Scandanavian anaesthetic centres while Honorary Secretary. His Presidential Address explored alternative uses for anaesthetic agents, wide research identifying applications ranging from the strongly disapproved (judicial execution, suxamethonium for aversion therapy, robbery, rape and murder, the last from as early as 1848) to the simply commercial (dry-cleaning & delaying the flowering of carnations during transport).

Alastair was educated at Bathgate Academy and studied Medicine in Edinburgh, thus following in the path of that great pioneer of our subject, James 'Young' Simpson. After National Service he returned to Edinburgh to complete his training, but



was disheartened initially by the lack of training/study time during his first NHS appointment. A year of general practice proved that this was not for him so he approached John Gillies at the Royal Infirmary of Edinburgh and was taken into the training programme. His service experience stood him in good stead so his advance was rapid and he was appointed as a consultant in the Royal Infirmary in 1956. An early interest was the relief of pain after surgery, a telling quote from a 1962 presentation to the Society reading: "We have succeeded in abolishing pain during operations: as far as pain after operations is concerned, we are still in the 1840s."

The early link to Simpson perhaps explains how he developed a major interest: history; and not just of anaesthesia, but of many aspects. He was President of the Old Edinburgh Club as well as of both the Scottish and British Societies for the History of Medicine, and spent his 'retirement' years as a very active and productive Honorary Archivist to the Royal College of Surgeons of Edinburgh. However, such activity did not mean that he was anything other than closely involved with the development of the specialty, even after he had decided that he had given cardiac surgery all that he could and moved to the more relaxed atmosphere of the general surgical unit at Chalmers Hospital, adjacent to ('part of yet apart from') the Royal Infirmary in Edinburgh. As well as being a strong supporter of this Society he served as Honorary Secretary of the (then) Standing Committee of the Faculty of Anaesthetists of the Royal College of Surgeons of England (1969-72), helping it become a definitive 'voice' for Scottish Anaesthesia at UK level.

At home, the quieter setting of Chalmers Hospital did not prevent him remaining at the forefront, many Edinburgh trainees finding that their first experience of a new development (technical or pharmacological) was to be found there. He was a clinician with the highest standards, resolute in the view that the anaesthetist must never leave the patient during the course of surgery, and one who recognized that research, clinical and basic science, are vital to the development of the specialty. In all of these he was a tremendous supporter of trainees, several generations of whom have good

cause to be grateful for his teaching and career support.

Beyond Medicine he enjoyed the good things of life: golf, food, wine, music and literature. With his wife Marjorie (the one positive outcome of the year's dalliance with General Practice!), Alastair was a generous host and an avid traveller of the World during retirement. He met his final illness with the same calm, unfussy approach with which he approached life, finding wry humour in noting that it had taken over fifty years after he stopped smoking for the cigarettes to catch up with him! He will be remembered as a superb clinician who, in spite of becoming an anaesthetist almost by accident, did much to advance the specialty (usually quietly and in the background) and also as a husband, father and grandfather who took far greater pleasure in his family's achievements than in his own. He is survived by Marjorie, four children (two of whom are doctors) and 8 grandchildren.

Tony Wildsmith & Ewan Masson

A fuller obituary can be found at: BMJ 2010; 340:c154



50 years of NESSA Iain Levack

The following manuscript records a talk entitled "50 years of NESSA" given by Dr Iain Levack at the 50th anniversary meeting, Stracathro Hospital, Brechin on 28 May 2010.

The Society has always kept to a format of around three meetings per year. Speakers usually from outwith the region are invited; there is a registrar's prize evening for anaesthetists in training, an AGM and a President's address. A summary of more than 100 invited speakers and 50 president addresses is not possible in the time available. The importance of the majority who are not mentioned here must never be underestimated; responsibility for any subjective bias is my own. A number of individuals described have been past Presidents and prominent also in the Scottish Society of Anaesthetists.

Guest Lectures

In 1964 **Dr Heinz Wolff**, from the Bioengineering Laboratory of the Institute of Medical Research, London, described the slow evolution of patient monitoring because of lack of funding and the tendency to adapt equipment which had been designed for other applications such as space exploration and industry. Display, recording, storage and retrieval of information were core requirements at a time when clinical monitoring was in its infancy. Wolff described the equipment of the time and how adaptation of certain machinery could provide early prototypes, eg, a modified juke box with selector arm to retrieve coded patient records rather than vinyl musical record discs. To date, he is the only non president to have given a president's address; this was made possible by the President, Dr Dangerfield of Dundee Royal Infirmary, inviting Dr Wolff to address NESSA in lieu of his own address. It was an inspired choice; Wolff is now widely recognised as a founding father of bioengineering and clinical monitoring.

The Anaesthetics Research Group (now the ARS) is the recognised forum for discussion of research in the United Kingdom. The photograph below (Fig 1) taken in July 1967 shows an ARG meeting on the front steps of the Royal Infirmary of Edinburgh. A number of those present in the photo-



Fig 1. ARG at RIE 1967.

graph have been visiting speakers at NESSA. Prof **AC Forrester -** Glasgow (front row 2nd from L) described Safety aspects and anaesthesia; Dr JD **Robertson** - Edinburgh (front row 4th from L) explained postgraduate education in anaesthesia entitled "The differentiating normoblast"; Prof JW **Dundee** – Belfast (front row, 5th from L) on iv alcohol as a possible anaesthetic agent: 8% alcohol in Hartmann's solution was titrated to effect. The professor concluded that although anaesthesia was achieved, recovery was slow and accompanied by malaise and headache. Dr DB Scott - Edinburgh (3rd row far R) gave two lectures nearly 20 years apart: on 1) the cardiovascular effects of IVC compression during spontaneous and controlled ventilation from either the gravid uterus or the prone position and 2) balanced anaesthesia using a combination of general and epidural anaesthesia. The latter was in 1979 and described a technique which has since become widely adopted. In 2007 and uniquely within NESSA, a second generation speaker (Dr NV Scott) addressed the Society. Prof DG McDowall - Leeds (4th row, 6th from L) lectured on cerebral ischaemia and the penumbra in 1982, a year before his own untimely death. Gp Capt A Merrifeld (4th row, 3rd from L) as a serving consultant anaesthetist in the RAF described the hazards of aeromedical transport in critically injured personnel. This was embryonic to the Critical Care Air Support Team which has been successful in recent Iraq and Afghanistan campaigns.

Dr DC White (3rd row, 3rd from L) was a NESSA President before he moved from Aberdeen to Northwick Park Hospital, Clinical Research Centre. He lectured on the life and times of Charles Waterton whose experiments with curare preceded its introduction to clinical practice. One of his



early interests was neuroanaesthesia and in Aberdeen he developed the technique of induced hypothermia by body surface cooling for neuroprotection. He is depicted here on the left with Dr CR Dundas (a former NESSA Council member) on a yacht belonging to the latter. They were kindred spirits and are entrenched in the literature including the distinction of a publication in Nature.²

Early Days of NESSA

Norman Rollason (2nd back row, 3rd from R) was a regular attender of the ARS for many years. On 27th May 1960, as President he chaired the inaugural meeting of NESSA at Aberdeen Royal Infirmary. **WM Shearer** of DRI was nominated vice president and **RG Milne** of ARI as Hon Treasurer. Ronnie Milne remained in this role for a remarkable 18 years. There were four Council Members: two from DRI - JI Murray Lawson and EH Franks, and one each from Stracathro and ARI – TR MacDonald and IM Cochrane respectively.

The aim of the Society was "to disseminate knowledge and enhance the practice of anaesthesia, to form a medium for exchange of ideas and to promote harmony among anaesthetists within the region" which included Elgin, Aberdeen, Stracathro, Dundee and Perth. The



Ronnie Milne

first guest speaker was Dr Keir Fisher from Glasgow whose topic was Hypnosis.

Finlay MacDonald (Fig 1 - far R between rows 1 & 2) was a founder member of NESSA (as a registrar in 1960) before moving to Manchester and ultimately to Glasgow Royal Infirmary. **J Selwyn Crawford** (Fig 1 - 3rd row, 2nd from R beside DB Scott) was a consultant in Aberdeen before moving to Birmingham and the founding Hon Secretary of NESSA. GD Parbrook (Fig 1 - back row

far R) was a Senior Registrar in Aberdeen before moving to a consultant post at GRI.

Some NESSA Presidents

Willie Shearer (1907-76) succeeded Dr Rollason as president. He was a St Andrews graduate and became a specialist anaesthetist in the RAMC during the second world war serving in West Africa and India. Returning in 1946 to DRI as anaesthetist in charge of the Department of Anaesthetics, there was a resident anaesthetist and himself, together with a few general practitioner anaesthetists. In 1972 when he retired the Department had increased to 24 anaesthetists. His colleague, Dr Ian Murray Lawson recalled: he had little time for



committees and did not consider that he was really fulfilling his duties unless he was working in the operating theatre. 3,4 When he dressed **NESSA** with a lecture entitled "It happened to me", one of his vignettes was his first use of a new neuromuscular blocking drug

(eulissin) on a healthy nurse undergoing appendicectomy. Recovery was very delayed casting suspicion and doubt on the new relaxant. The general physicians who had become involved with her overnight care explained her behaviour - as simply hysteria - after she had awoken the next day with no apparent ill effect. The rather unlikely diagnosis made by his colleagues appealed to his sense of humour.

In 1962 **John Latham** was the third President. He had previously come to Aberdeen as a senior registrar from London Bart's. Big John, as he was known, enjoyed life - both work and recreation - to the full. He was equally at home in the operating theatres of Aberdeen's hospitals, beside a dental chair, on a grouse moor or low ground pheasant

shoot, or sitting as magistrate. On firstaquaintance he might seem to h a v e stepped from the pages of a



novel by Richard Gordon, but behind his rumbustious bonhomie was a shrewd mind and a critical attitude towards his and others' work that made him a valuable person at the head of the operating table. He was by his own admission no academic indeed, he liked in a friendly way to mock those who were - but though self-deprecatory, he was well informed.⁵ This pen portrait was from a surgical colleague whose exacting standards challenged a number of anaesthetists. Outside his anaesthetic practice he kept clear of committees until later in life but then became an effective performer. Perhaps that was partly the result of his experience as a Justice of the Peace on the Aberdeenshire bench, a post that he held from 1971 until his retirement.

Norman McLeod from Perth Royal Infirmary, three years later, chose the title "An anaesthesia sequence for a Duchess". This highlighted the potential conflict of social niceties and safe anaesthetic perioperative practice. It included the tactful distancing of relatives and friends who on occasion might not strictly adhere to nursing rules and expectations of visitors' conduct. Though Dr McLeod broke no confidences nor indicated the frequency of his dealings with VIPs, his earnest advice was that every anaesthetic should be special and that VIPs should be treated in the same manner using the same routines and practices as for all other patients. It was implied in the discussion that the likelihood of such patients coming to PRI was predictable given that the hinterland was one of the fairest counties in Scotland.

Ian Murray Lawson of DRI and later Ninewells was a NESSA founding Council member and later

President. His address in 1970 described a year's tenure in San Diego as an Associate Professor of Surgery (anaesthetics). This was in the University of California and included supervising 30 inhalation therapists who were responsible for the application and maintenance of 70 artificial ventilator



machines. He commented on the successful three month rotation of resident surgical staff through the anaesthesia service and the practice of nurse anaesthetists who looked after most of the elective operations. The popularity of spinal, epidural and other local anaesthetic techniques was highlighted. He

advanced a number of novel types of practice in Dundee: in particular obstetric regional analgesia & anaesthesia; and the introduction of dental sedation as an alternative to chairside anaesthesia. In a previous Annals of this Society, Neil Mackenzie described Dr Lawson's interest in the outdoors and ornithology. He was a cycling enthusiast which began with journeys from boarding school in Fort Augustus home to Dundee and later return trips from Edinburgh where he was a student. The jackdaw which he had fostered and tamed as a schoolboy would accompany him on his journeys; Lawson peddling his bicycle and the jackdaw flying overhead.⁶

Dr Lawson is remembered by his family's generous legacy to NESSA which was donated in 2009 providing an eponymous award for the winner of the Registrar's Prize competition. The back cover shows Mrs Grace Lawson presenting this to the first winner Gillian Davies from Ninewells, watched by her Clinical Director Neil Mackenzie.

Two years later, **Drummond Hart** who was an exceptionally fine tenor chorister, entitled his President's address "Going for a Song". He chose to show clinically recorded changes occurring when singing. This was illustrated on an eight

channel pen recorder chart which had been previously produced in the physiology laboratory of Professor GR (Dick) Kelman in the University of Aberdeen by Drs Valerie Flook and Bertie Dundas. End tidal CO2 and airway pressure changes were monitored via a cricothyroid cannula. A radial artery cannula and central venous catheter provided appropriate cardiovascular monitoring. Intrathoracic pressure and derived oesophagogastric barrier pressure were recorded, plus an ECG. Dr Hart described the various changes according to his vocal pitch shown in the waveforms and reconciled them to visible external jugular venous distension and other effects of Valsalva. He also contrasted these with a second set when breathing an oxygen helium mixture.

Dr Hart was a natural athlete whose running prowess was evident most weekdays at lunchtime on the beach at Balgownie. In those days theatre sessions were usually am or pm but when all day, there was invariably a lunch break. A group of beach runners led by Dr Gordon Smylie, a microbiologist, donned swimsuits on the beach and then ran north at the water's edge to the Black Dog rock and back again. This was followed by a dip in the North Sea (total body immersion was insisted upon by Smylie) before a rapid reclothing, eating an orange and then a drive back to Foresterhill for afternoon activities. The group went to the beach regularly on weekdays throughout the year irrespective of weather and the ritual continued for over twenty years (its regulars were an oral surgeon, general surgeon, dentist, pathologist, and three anaesthetists – including the author when he was in Aberdeen). There was also an an-

nual run on the sand (swimsuit only and barefeet) from Balgownie to Newburgh from the estuary of the River Don to the Ythan – a distance of about 11 miles.

Walter Baruch was a consultant anaesthetist at Stracathro Hospital from 1963-74. His life events



were extraordinary: rejection from his country of birth because of his Jewish ancestry, a near fatal subarachnoid haemorrhage at 17 and internment as an "enemy alien" at 21. A year later in 1942 he returned voluntarily to Britain from Canada. His President's address to NESSA gave an insight to one of his accomplished outside interests – the cello. He was killed in a traffic accident when cycling near St Andrews aged 76.

The following year, NESSA president Brian Ken**nedy** described his part as an expert witness in an American Court of Law where Astra was ordered to pay 1.5M dollars for advertising the use of a product for which it had not achieved FDA approval. Previously Kennedy had published a review study on the safety of iv regional anaesthesia (IVRA) using lignocaine⁸ and concluded "we do not feel justified in continuing to use this technique with lignocaine, in view of the high incidence of toxic phenomena". The paper was cited in the Journal of the American Medical Association which resulted in Dr Kennedy being invited as an expert witness in a litigation where an American doctor had used lignocaine for an IVRA with a fatal outcome. The doctor was successfully sued by the family of the deceased to his financial and professional ruin. The doctor then instituted litigation against Astra for giving misleading information on its product's advertisement recommending it for use in IVRA but without FDA approval. Dr Kennedy described how he was recruited by a visiting team of American lawyers who sought him out in Aberdeen, two weeks of preparation in their office in Sacramento and his subsequent cross examination in the witness box.

Greg Imray of ARI in a lecture to NESSA chose a title "To screen or not to screen". This was in response to the Sheriff's recommendation that all patients should undergo pre-operative RAST (radio allergo sorbent testing) for allergy following a fatal accident inquiry into the death of a young Aberdeen woman under anaesthesia in anaphylactic shock. The suspected trigger antigen was suxamethonium. It was to Dr Imray's credit that as Chairman of the Anaesthetics Department at the time, his firm, audible yet tactful approach allowed the impractical recommendation to be rescinded without publicity. Dr Imray was a zealous

golfer whose e f recriminations on the course will be remembered by numerous players who were within earshot from both in front and behind and who were, no doubt, juggling similar emotions albeit less audibly.



Norman Rollason in 1959 came to Aberdeen as Director of Anaesthesia from Hull Royal Infirmary where he had been a consultant. This was to succeed Howard Wilson who had died suddenly at the age of 50 in status asthmaticus. Wilson was a national figure in anaesthesia who had been a Council member of the Section of Anaesthetics of the Royal Society of Medicine and twice elected to Council of the Association of Anaesthetists. He held a private pilot's licence and by using a private aircraft obviated the tedious rail journey during the 1950s from Aberdeen to the south.

The Department inherited by Rollason consisted of a Director, 4 consultants, assistant anaesthetists (SHMOs) and 9 trainees. An average of 73 patients were operated on each week day.10 His main contribution to Aberdeen was to negotiate successfully for intensive care beds, which be-



Howard Wilson

gan as a neurosurgical respiratory intensive care unit. 11 Dr Rollason's Department was well repre-



Norman Rollsson

sented at the ARS and also attracted a healthy influx of anaesthetists from other centres. The tradition within NESSA has been to invite leading speakers in their field and when the Society began, Dr Rollason actively nurtured this important objective. Following his left funds

death¹² in 1990 he

NESSA which Council unanimously decided to put towards an annual eponymous lecture. The first Rollason lecture was given in 1993 by the President of the Royal College of Anaesthetists entitled "Standards in Anaesthesia" in the presence of Mrs Rollason. A younger Alistair Spence can be seen in Fig 1 (back row, 4th from L).



Mrs Rollason, Dr John Ross (NESSA President) and Prof Alistair Spence (RCA President) - on the occasion of the inaugural Rollason lecture.

The next 50 years

NESSA continues to attract audiences of around thirty anaesthetists from within the region. Stracathro Hospital, equidistant from Dundee and Aberdeen, has become its regular venue. The adjacent Stracathro House which once served as the doctors' residence for the Hospital is currently under private refurbishment. Its Graeco-Roman por-

tico and characteristic front elevation is attributed to Archibald Simpson, the famous Aberdeen architect. During the past 50 years, the distinctive House and adjacent recently re-invigorated hospital seem to have emerged as the spiritual home of NESSA. A half century later, ever changing working patterns within ever changing hospital systems strongly justifies the continuation of this forum towards its centenary; the aim of the Society is as relevant now, and is likely to be still in 50 years, as it was when NESSA began.

Acknowledgements

I am indebted to Professor Spence for information about Fig 1; to Dr Ion Grove White for direction to Dr Baruch's obituary and to Dr Miriam Baruch (an anaesthetist in training in Newcastle) for the photograph of her uncle. Thanks also to Dr Nikki Thompson, NESSA Hon Secretary, for allowing access to the Minutes.

References

- 1 Proceedings of the Anaesthetic Research Group Edinburgh Meeting 1st July, 1967. British Journal of Anaesthesia 1967; 39: 687-91
- 2 White DC, Dundas CR. Effect of anaesthetics on emission of light by luminous bacteria. Nature 1970; 226: 456-8
- 3 obit. WM Shearer. British Medical Journal 1976: i: 346
- 4 Shearer WM. The uses of the narcotic alkaloids. atropine and ephedrine before anaesthesia with special reference to the effects of premedicant

Stracathro House (formerly the Hospital's doctors' residency).



doses on normal human subjects. MD Thesis. 1948; University of St Andrews

5 obit. John W Latham. British Medical Journal 1993; 306: 1335-6

6 obit. Ian Murray Lawson. Annals of the Scottish Society of Anaesthetists; 2010: 65-6

7 obit. Karl Walter Baruch. British Medical Journal 1996; 312: 633

8 Kennedy BR, Duthie AM, Parbrook GD, Carr TL. Intravenous Regional Analgesia: an Appraisal. British Medical Journal 1965; i: 954-7

9 obit. Howard Bruce Wilson. Anaesthesia 1958; 13: 470-1

10 Latham JW. The modern anaesthetist. Zodiac (Aberdeen Undergraduate Medical Journal) 1957; 60-5

11 Levack ID, Dudley HAF. Aberdeen Royal Infirmary: the peoples' hospital of the north east. Bailliere Tindall: London 1992; ch 11: 172 et seq 12 obit. William Norman Rollason. Aberdeen Postgraduate Medical Bulletin 1990; September: 40.



Incoming NESSA President Jan Beveridge (Strathcathro) is congratulated by her predecessor David Noble of Aberdeen. The back cover includes a photograph of the top table from the NESSA Anniversary Dinner with, left to right, Jim Dougall, SSA President; Neil Mackenzie, NESSA Past President; David Bogod; David Noble, then NESSA President; Prof. John Kinsella and Charlie Allison (Master of Ceremonies). Thank you to Charlie for the photographs.

Scottish Winter Meeting Edinburgh November 2010

The 2010 Winter Scientific Meeting was hosted by the Royal College of Physicians in Edinburgh in their magnificent Queen Street headquarters. The two-day event got underway with a warm welcome by Dr Jim Dougall, President of the Scottish Society of Anaesthetists, who reminded delegates that the society was formed almost 100 years ago in the nearby Balmoral Hotel, making it the oldest anaesthetic society in the world. We look forward to the centenary celebrations in 2014. He thanked local Consultants Dr John Wilson, Dr Alistair Baxter and Dr Paul Nicholas for organising the meeting.

The first talk of the day was on the modern management of stroke by Dr Malcolm Macleod, a Consultant Neurologist from the Western General, Edinburgh. This focused on new and existing strategies for re-perfusion following an ischaemic stroke, including thrombolysis and radiological re-vascularisation, as well as techniques to minimise secondary brain injury such as therapeutic hypothermia. The message to anaesthetists was that excellent results can be obtained but time is crucial to outcome so better to scoop and run than stay and play if we are called to facilitate transfer of such a patient.

The next session was presented by Wg Cdr Phil Dalrymple, an RAF Consultant in Anaesthesia and Critical Care, who provided a unique insight into the critical care management and transfer of patients from areas of conflict. Understandably, the focus was on Afghanistan and we heard how Camp Bastion has grown from a tented field hospital into a state-of-the-art facility where seriously injured soldiers and civilians are cared for. We were taken through the various stages that an injured soldier will experience, from the time of wounding to arrival in the UK, with the final transfer being coordinated by the Critical Care Air Support Team. As will be the case elsewhere, there are local consultants and trainees who are heavily involved in this process so it was extremely interesting to learn more about it.

Dr Steve Cole, a Consultant in Critical Care from Ninewells, then spoke about developments in organ donation including the ethical dilemmas that face patients, families and medical teams. The demand for donor organs greatly outstrips supply, with around 1000

people a year dying while waiting for a transplant. A growing proportion of donations are 'controlled after cardiac death' and this may be extended to 'uncontrolled donation after cardiac death' i.e. out-of-hospital arrest, and donation from the emergency department. The possibility that the UK might introduce an 'opt-out' or 'presumed consent' policy has been ruled out for the foreseeable future.

The next speaker was Dr Iain Wilson, recent president of the AAGBI, whose lecture was cryptically entitled 'Anaesthesia 2010'. Dr Wilson gave an excellent overview of current NHS policy and how it affects both patient and practitioner. Many areas were touched on including the reduction in SPAs and removal of discretionary points for new and existing consultants. In this age of austerity (apologies for the cliché), it seems that NHS consultants are a prime target for cost-cutting measures, and questions from the floor suggested that our representatives should work hard to prevent these from being excessive. Overall, however, the message was positive and we were reminded that sustaining morale is a top-down process and we must resist being drawn into a destructive culture of moaning.

The afternoon session began with a lively and entertaining debate entitled 'It's Much Better to be Able to See Round the Corner'. Proposing the motion was Dr Ben Shippey, Consultant in Anaesthesia and Critical Care from Fife, and a pioneer in the development of the McGrath videolaryngoscope. Dr Shippey argued passionately that being able to see round the corner was safer, and ultimately more economical, than persisting with the antiquated Macintosh laryngoscope. Opposing the motion was Dr Bill Brampton, a Consultant Anaesthetist from Aberdeen who has been at the forefront of researching the efficacy of videoloaryngoscopes, including the McGrath. Dr Brampton argued eloquently against the motion, pointing out that the Macintosh has survived unchanged for so long because it works and has an excellent safety record. It is also so ubiquitous that a massive replacement and re-training effort would be required if its place were to be usurped by one of the many videolaryngoscopes on the market. When put to the vote the motion was defeated, but both speakers

agreed more training should be available for all anaesthetists on these increasingly prevalent pieces of kit.

On an entirely different note, it was a great pleasure to welcome Dr James Harris to the meeting. Dr Harris is a Senior Lecturer in Philosophy at the University of St Andrews, his research being mainly on the eighteenth-century 'Scottish Enlightenment'. We learnt of the rapid technological and intellectual advances being made at that time in Scotland, and at the heart of it was the philosopher and historian David Hume. Hume endured a period of severe depression, in an episode which was to define and shape his future life and work. He described in great detail the symptoms he experienced and remedies he was administered. One of the mainstays of treatment for the so called 'disease of the learned' was an English pint of claret every day. This certainly seemed to help Hume's mood, if not his waist-line.

The final talk of the first day was the Gillies Lecture titled 'Nobody's Perfect' by Prof Brian Toft, Professor of Patient Safety at Coventry University. This addressed the fascinating topic of human factors in errors affecting patient care. He discussed the fundamental reasons why humans make fallible decisions including our predisposition to being misled and prone to biases as well as fatigue. Risk identification can be enhanced by multidisciplinary assessment of risk. A number of case presentations demonstrated how factors involving time pressure, poor communication and distraction can accrue to produce catastrophic error.

The second day of the conference began with an enthralling talk by Dr Gareth Clegg, Consultant in Emergency Medicine at the Royal Infirmary of Edinburgh, on the Temperature Post-Out-of-hospital Cardiac Arrest (TOPCAT) study. This study was conducted over a 14-month period and looked at physiological variables including temperature and markers of systemic inflammation in the immediate period after out-of-hospital cardiac arrest. The early findings in this study have suggested possible mechanisms of action for cooling of patients post-cardiac arrest. It has also influenced training amongst local paramedics by emphasising the importance of continuous CPR.

Dr Nikki Maran, Consultant Anaesthetist at the RIE with a special interest in patient safety and simulated training, continued the day with 'Putting Human Factors into Anaesthetic Practice'. She discussed errors of omission and mistake and the medical profession's tendency to migrate towards 'normal illegal' actions as a way of dealing with workload and distractions. Dr Maran highlighted the role of training in non-technical skills and error recovery. She pointed out a recent publication by

the DoH on the expanding list of 'never events' that are unacceptable in healthcare as well as the role of the WHO Surgical Safety Checklist.

The next speaker was Dr Rupert Pearse from Barts and the London NHS Trust. He focused on the benefits of providing critical care to all high-risk surgical patients. He considered ways to identify high-risk patients and specific interventions to reduce risk such as perioperative beta-blockade, early non-invasive ventilation for post-operative hypoxia and low-dose inotropes with cardiac monitoring. He emphasised the necessity of good nursing care in promoting patient recovery.

A talk by Dr David Swann, Consultant in Anaesthesia and Critical Care, on infection control in critical care illustrated the challenges facing all hospital staff in reducing patient infection rates. He described why patients are susceptible to healthcare-associated infections including immune suppression, invasive equipment and surgery. The issue of microbial evolution and the struggle against biofilms and biocide resistance are core to overcoming infection in the ICU. He presented data supporting recent reductions in hospital-acquired infections, including ventilator-acquired pneumonias, within ICU in the RIE through the adaptation of evidence-based interventions such as care bundles.

This led onto a talk by Dr Elizabeth Wilson from the same unit. She presented research which highlighted the physical and psychological problems patients experience after leaving the ICU with particular emphasis on depression, delirium and cognitive decline. Current aims in providing post-ICU care focus on assessment, rehabilitation, provision of information and emotional and physical support. It is unclear how best to deliver these services but it is apparent that further research into optimising post-ICU recovery is needed.

The second afternoon began with a lecture by Prof Ian Power, Chair of Anaesthesia, Critical Care and Pain Medicine in the University of Edinburgh. He gave a run-through of recent updates in pain medicine and described some exciting new fields of interest such as direct cranial current stimulation in the treatment of neuropathic pain, the role of intranasal xenon as an analgesic and the possibility of genotyping for pain therapy. Prof Power suggested that the ongoing value of psychological therapies and acupuncture cannot be understated. The significance of good pain management within the hospital environment, not only by the acute pain team but by all responsible members of staff was stressed.

The next talk concerned anaesthesia for the elderly and was presented by Dr Andrew Severn, a Consultant Anaesthetist in Lancaster. He is a longstanding member

of the Age Anaesthesia Association and has played a key role in the development of the geriatric section of RCA e-learning curriculum. He discussed the issues facing anaesthetists in dealing with an ageing population and how simple interventions such as pre- and post-operative mini-mental state examinations and recognising frailty may help to avoid complications in this fragile patient group.

The final talk of this year's meeting was by Dr Alistair Baxter who works in the Royal Hospital for Sick Children in Edinburgh. His presentation covered new equipment in paediatric airway management such as microcuff endotracheal tubes and adjuncts to one-lung ventilation. The use of total intravenous anaesthesia and peripheral nerve blockade is well-established in the paediatric group. Dr Baxter outlined challenges in the organisation of paediatric services and matters relating to clinical governance and research.

The 2010 Winter Scientific Meeting offered its attendees an impressive range of new and intriguing information presented in a friendly and relaxed atmosphere.

Dr C Baird (ST6 Anaesthesia) and Dr V McMullan (ST3 Anaesthesia) Royal Infirmary of Edinburgh



Brian Toft receives the Gillies Bowl from Liz McGrady and Jim Dougall.

Travelling Fellowships



The Society would like to encourage members to teach or learn abroad. Grants of up to £1000 (to a limit of £5000 in any one year) are available. The trip may be primarily as aid to less developed parts of the world or possibly to learn a new technique somewhere in the developed world – provided you are not in paid work there. Apply to Dr McGrady, the Hon. Secretary.



Marcia McDougall and David Ray



Malcolm Booth and Alisdair MacConnachie



Genevieve Lowe receives the runner-up prize.



Sarah Cross and Jenny Edwards.

Craig Beattie receives The James McG Imray Memorial Prize (see right) from John May and Dr Imray's wife.





Trainees' Meeting

Peebles Hydro 23rd April 2010 Sarah Cross

We had a record number of trainees registered for this year's meeting, with more turning up on the day. Some had travelled from afar and risked flying through volcanic ash to be with us!

They were welcomed by the President Dr John May and the meeting got off to a good start with Dr David Ray from the Royal Infirmary of Edinburgh getting back to basics on the subject of RSI drugs. There was a useful summary of published evidence and the Lothian experience. Next was a stimulating talk by Dr Marcia McDougall from Fife Acute Hospitals on her work with Mercy Ships in Africa. It would not have been complete without the graphic before and after pictures that would challenge anyone thinking of taking up this fantastic opportunity.

After refreshments and a good look around the variety of trade stands, Dr Eddie Wilson from Ninewells gave an informative look at post-CCT opportunities with plenty of questions to follow. Lunch involved a great spread with a chance to catch up with colleagues from around the country.

Taking the difficult post-prandial slot was Dr Malcolm Booth from Glasgow Royal Infirmary who took us through a detailed update on burns management in ICU. Dr Alisdair MacConnachie from Gartnaval General Hospital followed with a comprehensive talk on HIV infection, dispelling some of the medical myths about consent and testing.

There was a last chance to look at the wide variety of posters displayed over coffee before presentation of The James McG Imray Memorial Prize. This went to Dr Craig Beattie as winner of the best

poster presentation 'Difficult airway communication'. Runner up prize went to Dr Genevieve Lowe for her poster titled 'Confirming death: a survey of current practice'.

The final lecture was a thought provoking look at Obstetric Anaesthesia in the less developed world by Dr Vicky Clark from the Royal Infirmary of Edinburgh. It certainly makes you realise how lucky we and our patients are in the UK and it brought up some interesting questions about how to set up educational programmes abroad.

Lastly was the election of a new trainee council member. Congratulations to Dr Vishal Uppal from Glasgow, who I look forward to working with in the future. He replaces Dr Jenny Edwards who I would like to thank for all her hard work over the last few years.

A few energetic people joined the 5 km run before the champagne reception on the President's balcony started the evening's proceedings.

Thanks to all the speakers, trade sponsors, hotel staff and executive committee members who helped to make this meeting such a success. We look forward to a new and exciting venue at Crieff Hydro in 2011.

Annual Golf Outing Lanark Golf Club June 2010

Lanark Golf Club hosted the Society's golf day in June 2010. As a choice of venue, it emerged after consultation between the Executive and the 2 previous winners and proved both enjoyable and surprisingly affordable. Like Crail (2008) and Edzell (2009) it is a real pleasure to play but not so challenging as to make the second round a wearying chore.

The club was founded in 1851 with 6 holes set out on the Common Moor of the Royal Burgh of Lanark and is the 25th oldest golf club in the world. In 1897, Tom Morris Snr was paid £3 10shillings to lay out 18 holes and in 1927 James Braid designed several new holes. There have been only small changes since and Lanark is one of the few early golf clubs whose location has not altered during its life.

Built on a substrate of glacial sands, its moorland fairways have excellent views over the Southern Upland hills. There are similarities to Gleneagles and the club's web-site indicates that only the casting vote of its chairman caused the LSM Railway Company to decide to build its hotel at Gleneagles rather than Lanark. Its quality is well-

recognised and it has been a pre-qualifying venue for the Open Championship on 11 occasions.

We were again fortunate with the weather. The morning Stableford produced a thrilling denouement when I got down in 2 from a tricky position below and to the left of the last green to record a total of 39 points, edging Rae Webster by a single point. Eddie Wilson won the now customary "nearest the pin" prize.

An appealing lunch followed, with views out over the green of the somewhat demanding 18th. The morning's exertions and a paucity of East of Scotland golfers made the task of composing teams for an afternoon contest insuperable. Provisionally, therefore, the long-standing tradition of the East v West afternoon contest has now lapsed. It will be replaced by something like a Texas Scramble which will hopefully allow some sort of team golfing and permit a shorter and less tiring afternoon round. The day concluded with an excellent high tea – in keeping with the very good fare available on arrival and at lunch-time – and then we all sped off.



Donald Campbell Quaich

2011 Trainees' Competition



Up to five trainees will be invited to give a 10 minute presentation of their research or audit at the Annual Spring Meeting at Crieff.

As well as the Donald Campbell Quaich, the author of the best paper will receive a prize of £250 (and will get to go to Crieff at the expense of the Society in 2012)

There will also be prizes for the runners-up.

Entries by the end of February please. Details from Secretary, Elizabeth McGrady.













