

The Annals of The Scottish of Anae

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Aberdeen

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Welcome to this bumper edition of the Annals. Bumper because the major articles were all a bit longer than usual and despite liberal use of the red pen I needed to add some pages to get it all in.

This year we carry obituaries of two former Presidents of the Society, Professor Sir Donald Campbell and Greg Imray – they are sadly missed.

Once again my thanks to Angela Heidemann for the excellent front page artwork. There were lots of thoughts as to a suitable caption: "Ventolin jobs fear"; "Drag hunting"; "Virginia's after Slim"; "Banning and Hedges" – all great fun.

Professor Alistair Spence gives us an historical nugget with a story from the beginnings of the Society. This gave me the idea to put a "History Section" on the website. There is an excellent history of the society which formed Lawson Davidson's Presidential address in 1979. These articles will make a good start. Let me know if you have any other ideas. Hopefully by the time this you read this I will have it set up. I have at last persuaded the college website to put in a link to ours and lo and behold you can now, at last, find us by "Googling." If anyone can help get links from other relevant sites please get in touch.

My thanks also go to Ewan Jack for his report on the Trainees' Meeting and to Henry Robb from Falkirk for his, er, forthright views. JK Rowling's lawyers will hopefully overlook page 53. I may need to take a photography course as I have only a few usable pictures from last year - good news for the Peebles' dancers and their blushes.

Our health service comes in for a lot of criticism. At the College Study day in Dundee Dr. David Greaves reminded us that the NHS, contrary to its Press image, is actually a lot better than it used to be. This year the "centrefold" features not Peebles but the articles submitted by three of the Society's travellers who tell us of their adventures working in places far from the worries of the NHS.

I'm writing this a week or so after the Tsunami. Last night there were pictures of field surgery without anaesthesia.



President's Message



Changes in the NHS continue apace: Agenda for Change, National Framework for Service Change, Community Health Partnerships, Hospital at Night, etc. It's not quite Monty Python's Circus but the programme and performers seem to change more frequently than the models in a fashion show. Is it too much to hope that one day the NHS will become non-political? Off-course it is, and consequently we all have a responsibility to ensure that standards of patient care and training are not compromised in the rush to achieve political targets. If we are honest with ourselves, as a medical profession we are far too passive. This may be in part due to our Scottish Presbyterian heritage – I hope it is not complacency or worse, pessimism.

The need to become more involved is readily seen in the lack of representation of 'Clinical' Consultants (i.e. those involved in direct patient care) on Professor David Kerr's Advisory Group for the National Framework. We are fortunate that the membership of the Scottish Standing Committee consists of colleagues who are driven by a desire to ensure that standards are improved and not compromised. Over the next few years their advice and persuasive skills will play a crucial part in the decisions of our Scottish Parliament.

Our younger colleagues I suspect will not be quite so passive. If the enthusiasm and drive typified by Kerry Litchfield and Bernhard Heidemann is anything to go by our patients and the Scottish Society of Anaesthetists will be in good hands. Kerry and Bernhard organised a splendid and very well attended Trainees' Meeting in Dunfermline.

Just to show the young ones that there is still life in the old dog, Fergus Miller and his colleagues in Dundee held a two-day meeting at the Westpark Conference Centre jointly with the Royal College of Anaesthetists. The Scottish Society Scientific Meeting and RCA Study Day proved to be such an outstanding success that the same format may well be tried again in a few years time. Dr David Scott from Edinburgh presented the Gillies Memorial Lecture in a wonderful manner and style befitting the honour of John Gillies.

The Scottish Society of Anaesthetists as always continues to review its role, but it is important not to forget that its strength lies in the fact that it encompasses all anaesthetic sub-specialities. In its educational and social activities it provides a unique environment for healthy debate - not just between colleagues but friends. None of the Society's activities would be possible without the hard work and dedication of our Secretary, Treasurer and Editor – our sincere thanks go to Alastair, Jane and Steve.



Presidential Address

A Great Ducal Family

Dr John D Mackenzie

I would like to thank council and members of the Society for the honour and privilege of being elected to the Presidency of the Scottish Society of Anaesthetists.

It is my first and very pleasant duty to thank on your behalf Professor Tony Wildsmith for the exemplary manner in which he has conducted the affairs of the Society during his term of office as President. I am particularly pleased that Tony will still be on council for the next year, as his wise and prudent advice will be much appreciated. Thank you Tony.

My first visit to an AGM of the Society took place when the annual pilgrimage was to Aviemore. Norma was pregnant and we were a little unsure as to what it would be like. We needn't have worried because the attentiveness of Lawson and Julia Davidson, Greig and Louise Imray and last but certainly not least Ian and Mary Smith made that first visit to Aviemore thoroughly enjoyable. With their encouragement we came the following year with Suzie and in subsequent years with Sam. As for every parent who has taken their young children along - and the younger the better - the experience is always delightful. Members go out of their way to welcome new members young and old and this is a feature which I think the Scottish Society can rightly be proud.

I was brought up in the highland Northeast coastal village of Balintore, not too far from the Royal Burgh of Tain. It is situated on the peninsula that separates the Dornoch and Cromarty Firths, just north of the Black Isle. In my childhood the Oil Boom and all the changes it was to bring to the Moray Firth and Invergordon area was still some 20 years away. Balintore, like so many other small fishing villages in the Northeast, was nearing the end of its time as a fishing port.

This picture - taken in the early 1900s - when my grandparents were in their teens shows part of the village with its thatched terraced cottages. Life was obvi-

ously fairly hard then. The famous 50-foot Zulu sailing boats used by the fishermen in those days were to disappear over the next 30 years and be replaced larger diesel engined vessels. There was a dramatic decline in herring stocks over the years and this meant that during my childhood in the '50s the only fishing industry left in Balintore was that of coastal salmon fishing. Work would start in late February with the whole of the harbour and grassy area around strewn with nets, upturned boats and all the paraphernalia associated with salmon fishing. Coables - shallow clinker-built wooden boats about 25 ft long - would be turned upside down ready for tarring from large vats of tar boiling over wood fires. The men dressed in old oilskins and seemed to tar anything that didn't move! Nets were hung up on high poles and patched and mended, while a few new ones were produced from material sent by the manufacturers in the South. Salmon fishing was indeed an important industry for the village because it employed more than half the men throughout the long season - which didn't really end until all the equipment was stored away in October.

It was from this background that I remembered my first visit to the country town of Tain - with what seemed like lots of shops and crowds of people. Travelling north towards Tain you get a wonderful view of the Dornoch



Firth and beyond. On the top of the hill overlooking Dornoch there is an impressive monument looking out across the landscape, which you can see for miles around. There is no doubt that it's there as a reminder of the importance of someone – in this case the Duke of Sutherland.

Like many others from the highlands I went to Aberdeen University and apart from spending some of my teenage years in Edinburgh I have lived there ever since. You cannot live in any city for over 30 years and not be influenced to some extent by the people and its history. While Aberdeen does not have a heritage as important or as great as that of Edinburgh - and perhaps for politeness we should also mention Glasgow - the city and the people of Northeast have played their part in Scottish - indeed British and European History. Most of you will of course associate Aberdeen and the Northeast with the Gordon Highlanders - and the statue of the Duke of Sutherland, which gazes out across the Dornoch Firth has also a strong connection with the Dukes of Gordon. It is the history of the Dukes of Gordon that I wish to talk to you.

The Dukes of Gordon were without doubt one of, if not the most formidable and influential of the Scottish aristocratic families. Their pedigree and background stands up to any of its English counterparts and they are linked with and intermarried to some of the greatest families in Britain and Europe. The history of the Gordons can be best be split into three periods:

1. Living in the Borders and acquiring land in the NE.
2. Attaining recognition as part of the British Aristocracy and involvement with the Jacobite cause.
3. The raising of regiments in the Napoleonic Period.

The earliest record we have of the family is of one Adam de Gordun receiving lands in the borders for his assistance in the defeat of Macbeth at the battle of Lumphanan in 1057. It is some time later before we begin to see reliable records of the family's activities. A Richard de Gordon signed a charter in 1171, granting land to the monks of Kelso in the town of Gordon in Berwickshire.

Surviving, holding on to and expanding one's property in the 11th and 12th centuries was a bloody and costly affair and the Gordons appear to have had all the attributes required in good measure. They were not averse to changing sides whenever it seemed wise or prudent to do so. In the late 13th and early 14th century - that period of the great wars between Scotland and England when Edward I became "Hammer of the Scots" - Sir Adam de Gordon Knight changed his allegiance several times. Sir Adam was Scottish ambassador to Pope John XXII and more controversially he was also appointed as one of

the commissioners for Scotland in the English Parliament. He had however the good luck and sense to be on the side of Robert the Bruce at Bannockburn. David, Earl of Athol, was not so fortunate. He sided with Edward and lost not only his Barony but also all his lands in what was then called Strathbogie – a large area of land in the adjoining parts of Aberdeenshire, Banffshire and Inverness-shire. His bad luck was Sir Adam's good fortune as he received the forfeited lands and title from his grateful King.

The wars between England and Scotland never seemed to end – Sir Adam's son was a member of that great force which invaded England in 1333 and who were heavily defeated by Edward III at Halidon Hill. Power and the accumulation of land were the prime motive behind the continuing almost reckless behaviour of the Scottish nobility and for the next 200 years there was little let-up in this acquisitive conduct. By the end of 14th century the Gordons had achieved the status of an Earldom - the Earl of Huntly. In the best traditions of the family in 1513 the 3rd Earl of Huntly, together with his cousin Sir John, followed King James IV on his fatal march into England.

Led by their gallant but reckless King, the Scots had one of the most formidable armies ever to have invaded England. Henry VIII was busy in France fighting Louis XII - and had left the aged and venerable Thomas Howard, Earl of Surrey as Regent. On the 8th September 1513 the two armies met on Flodden Field. The action began with Huntly falling on the English right wing commanded by Admiral Howard - Surrey's son. Howard and his troops were crushed, their banners were brought to the ground and his men fled before the triumphant Scots. His complete annihilation was saved only by the timely arrival of his father, Surrey. The English division began to drive Huntly back – and it was at this point that the Scottish centre, commanded by the King himself, entered the fray.

The battle continued until nightfall with only a remnant of the Scots army managing to escape. Flodden Field was one of the greatest military disasters ever suffered by Scotland. James IV was slain along with his son Alexander (Archbishop of St Andrews), twelve Earls, fifteen lords and chiefs of clans, the Bishop of the Isles and thousands of Scots. The Earl of Huntly barely escaped with his life; his cousin Sir John was less fortunate.

We now enter that period when the Gordons were attaining recognition as an Aristocratic Family and of their involvement in the Jacobite cause.

The Earl was elevated to a Marquis shortly before the

Union of the Crowns in 1603 and eventually to a Duke by 1684. At last the Gordons had now fully established themselves as one of the Scottish Aristocracy.

Politically the Gordons as Catholics supported the Stuarts and in three of the four Jacobite Rebellions they opted for the side of Rome. In the first attempt, in the early days of William IIIrd's first Scottish Parliament, the 1st Duke of Gordon held Edinburgh castle on behalf of the exiled James VII. While the second attempt was a fairly minor affair - the third of 1715 is more renowned. By then the 2nd Duke, Alexander, was elderly so his son Cosmo, the Marquis of Huntly, represented the family. Cosmo regrettably did not do the family proud - his conduct and alleged cowardice at the Battle of Sheriffmuir formed the basis of a ballad at the time -

Wha wad hae thoct the Gordon Gay
That day wad quat the green man
Wi' a' the Gordon tribe man

However, in the final and most promising attempt by the Stuarts in 1745, Cosmo, now 3rd Duke of Gordon, remained loyal to the House of Hanover - that well tried strategy of switching sides obviously still hale and hearty. His younger brother Lord Lewis Gordon however, supported Bonnie Prince Charlie and the support of such a powerful and noble family gave the Jacobite cause considerable encouragement. On 16th September Bonnie Prince Charlie made his triumphant march into Edinburgh at the head of his troops with the Duke of Perth on his right and Lord Lewis Gordon on his left.

While the Young Pretender marched into England, Lewis headed north and busily recruited men for the Jacobean cause from his brother's tenants. More than a score of the Gordon Lairds helped Lewis recruit and by far the most important motive was the possibility of advancement under a new administration. Lewis succeeded in raising over one thousand men, mostly vol-

unteers but some by the payment of levies. Meanwhile Cosmo never wavered in his loyalty to King George. In Sept '45 while the Young Pretender headed south he travelled from Gordon Castle to Banff to meet Sir John Cope and express his loyalty. Later, in the spring of 1746, the retreating rebels surrounded Gordon Castle. The Duke's own cousin, Lord John Drummond, with part of his Jacobite regiment and a number of French cavalry were actually billeted within the castle and watched the Duke's every move. Despite this on the 8th March the Duke managed to escape to Aberdeen and avoiding picquets and roving patrols, swore allegiance to Cumberland and the Throne.

Prince Charlie meanwhile had left Inverness for Gordon Castle to visit his troops. He stayed overnight in Elgin at the house of Mrs Anderson of Arradoul - a staunch Jacobean supporter. It is said that she preserved the Prince's sheets so that when she died her body might be wrapped in them. When he arrived at Gordon Castle around the 13th March the Prince demanded under pain of execution that food and meat be brought to his army from the surrounding district. Cosmo's wife, the Duchess Katherine Gordon, would have nothing to do with the rebels and steadfastly refused to meet the Young Pretender. By the 12th April Cumberland's army was at Gordon Castle and the Duke and Duchess' ordeal was over.

Culloden was a disaster for the Stuarts and had repercussions throughout the highlands for decades to come. Although policed by the Hanovarian army in the post Culloden years, the Northeast did not suffer the often cruel and punitive measures meted out in the Central and Western Highlands. Life quickly returned to normal, the tartan ban affecting only the outer reaches of the Gordon estates in places like Strathdon and Cabrach where the it was still used in every day dress.

The Nobility returned to the social rounds of summer visits to Edinburgh, York and London while the local Lairds escaped to Peterhead and Banff for the winter. For his loyalty to the Hanovarian cause Duke Cosmo was made a Knight of the Thistle. He did visit his brother Lewis in Boulogne though for obvious reasons he did not attempt to get him pardoned. There was considerable sentiment in the highlands towards Lord Lewis and the young prince. A simple ballad of the time goes -

O send Lewie Gordon hame
And the lad I dawna name
Though his back be at the wa
Here's to him that's far awa

Cosmo never really enjoyed robust health and died soon



after aged only 32. The widowed Duchess, Katherine, was a lusty 33 year-old and it wasn't long before she resumed her social rounds in London. During one of those visits in 1754 she met her strikingly young and handsome Polish relative Stanislaus Poniatowski who was eventually to become the last King of Poland. The Duchess tried in vain to kindle a spark of romance between herself and the future Polish King but alas the age difference of fourteen years proved too great.

She persisted though and the next year she met and after an extraordinarily short courtship married Staats Long Morris from a wealthy American colonial family who owned large tracts of land in the vicinity of New York and New Jersey. Staats' half brother followed Jefferson as the American ambassador to France – so his family was not without influence – but they lacked the Noble touch, and it is presumably for this reason that Staats found marriage to the Duchess so appealing. However, being accepted by the British aristocracy was not so easy.

Katherine could not get Staats into the Guards so she had the idea of raising her own regiment. The timing was opportune as Britain, in the throes of empire building, was engaged in a bitter struggle with France. It was also only 13 years since the Jacobite uprising and offered a way of erasing any remaining doubts about the Gordon Loyalty.

We have now reached the period when the Gordons successfully raised a number of Regiments and Napoleon was wreaking havoc in Europe.

For all they contributed to community and country it was in the field of arms that the Ducal Family gave most. The new regiment, nominally raised by Katherine's 16 year-old son, the 4th Duke, Alexander Gordon (who was at Eton), was in reality raised by Staats and was given the official title 89th of Foot. This was the first of four regiments raised by the 4th Duke but it was really due to his mother Katherine's patriotism and blatant ambition that this first regiment came to be. The regiment assembled at Gordon Castle where the young Duke could be seen daily parading in full highland dress.

The 89th was a regular, not a fencible regiment – and therefore liable to be sent overseas. They were sent to the West Indies but Alexander was spared by the King who thought that the shortage of Dukes in Scotland merited him remaining in the kingdom! So it was that the 4th Duke spent the next few years completing his education with several continental tours - visiting Geneva, Paris and Rome. It was while on a visit to Edinburgh that he met his Duchess to be – Jane Maxwell,

flower of Galloway. As a girl – this was before the upper classes moved to the New Town - Jane would play with her older sister at Peter Ramsay's stable yard in St Mary's Wynd. A year before she met the Duke, she had learned that the soldier to whom she was betrothed had been killed in action. Now this impetuous, attractive woman stole the Duke's heart and following their marriage the Duke took his Duchess Jane on a tour of Britain to show her to the English aristocracy and meet the King.

However, on returning from her honeymoon, a letter from her soldier lover awaited her. She opened it with trembling hands and to her dismay she read that he was not dead but on his way home and eager to marry her. She, realising that things could not be undone, thrust herself into the activities of the upper classes where as time passed she became famous for her parties, gaiety and fashion. Her assemblies attracted the most brilliant wits, orators and statesmen of the age and her bright well read mind allowed her to correspond and meet the Scottish literati of the day such as Burns, Scott and Hume.

The Gordon Castle that Jane Maxwell saw for the first time was a grey six-storey tower built by the 2nd Earl in the 15th century. It was not a home suited to one of the wealthiest nobles in the land. Within ten years the frontage stretched 568 ft and was set in a vast parkland adorned by ornamental lakes and formal gardens.

At this point the French signed an alliance with America. The British Government decided to form more Fencible Regiments in case the French invaded. The Duke, after attending a Levee with the King in St James Palace, decided to raise another regiment. This was no easy task as half a dozen other regular Scottish regiments were recruiting replacements throughout Scotland, including the Northeast. The problem was eased to some extent by the Comprehending Act which, liberally interpreted, meant that loafers, smugglers and vagabonds could be pressed into service. Within a year the 4th Duke of Gordon had recruited a thousand men.

This was also a period of social and political unrest in Britain. Parliament had recently passed an act to abolish the more oppressive regulations against Roman Catholics. However, this caused great offence to the more ardent Protestants who set up associations and conducted a virulent campaign. The 4th Duke's younger brother Lord George Gordon who was a Member of Parliament became the leading anti-Catholic speaker in the country.

A crisis was not far away. Lord George gave notice that he was to lead a procession to the Houses of Parliament with a petition to repeal the Act. He arrived at West-

minster at the head of 60,000 people on May 2nd 1780. The atmosphere was electric as their leader, leaving his supporters in the lobbies and grounds outside, entered the chamber at ten o'clock. Fearing a revolt in the house, William Gordon of Fyfe quietly said to his cousin, "Don't imagine Lord George that if you bring any of your rascally adherents into this House you will escape in the wild uproar that is likely to ensue. For by God, the moment the first ruffian enters the door of this assembly, that instant I will run, not him, but you, through the body." This warning had a salutary effect on the Noble Lord and he remained noticeably quiet in the chamber.

However, for nearly a week afterwards London was in the hands of the mob - pillaging and burning every Catholic building they could find and causing immense damage. The King himself took charge and ordered that examples be made. Many were arrested and twenty-nine executed but a scapegoat was needed. Lord George was confined to the Tower of London for six months until a Bill was preferred against him for high treason. At trial his lawyer pleaded that the Hon. Lord was merely representing the feelings of the country, and that he, far from inciting the mob, tried to restrain them. He was acquitted and so ended the affair known as the Gordon Riots.

The political and social influence of the Gordons was considerable. Jane Maxwell, the Duchess of Gordon, continued her rounds of social engagements in London and Edinburgh and was now the acknowledged leader of fashionable society. She was never absent from social gatherings and the later the hour the better. Newspaper articles contained headlines such as "It is often four in the morning before she goes to bed and she rises at nine without any diminution of spirit."

In was at the end of 1786 that the Duchess first met Robert Burns. This robustly handsome man immediately swept her off her feet. By this time Burns was accepted and patronised by the small number of literati in Edinburgh but this was not enough for the ambitious poet. He wanted access to fashionable society. Even though he had an avowed contempt for those of rank and privilege, Burns was firmly tied to the yolk of patronage. Befriending the Duchess would indeed be an advantage to him considering the circle of noblesse she moved among.

Jane was also acutely politically aware, had a ready wit and was entirely at ease at the highest circles at court and Parliament. This proved useful to the government when there was great concern at the size of the Heir apparent's debts. There existed at the highest level a disposition to accommodate matters without making



Jane Maxwell

disclosure to Parliament. It would take someone persona grata at court to hint discreetly to the Heir the solution to his problem. There was none better suited for this than the Duchess - after all she spent almost every night in the Prince's society at Charlton House and was on familiar terms with Pitt and all the leading Tories. The Prince, persuaded by the subtle suggestions of the Duchess, ultimately passed his debts to Dundas and in addition received liberal assistance - the crisis was over.

Of course one crisis often follows another and the Regency Bill was a period of bitter Parliamentary debate. George III was showing signs of mental instability and while Pitt and the Tories recognised the Prince of Wales assuming the Regency they wanted to limit his powers. The Whigs on the other hand strove to expand them. The Duke of Gordon was fiercely loyal to the King and so once he was restored to full health, the Duke received the Keeper of the Grand Seal of Scotland - the most lucrative office in the gift of government, worth 3000 pounds. George III did not forget his friends.

The Duchess Jane was determined that her daughters would marry well and she hoped to marry her eldest daughter Charlotte to her great friend Pitt, the Prime Minister. It was not to be but she lost no time in arranging Charlotte's marriage to Col. Charles Lennox, a great-great grandson of Charles II and heir to the 3rd Duke of Richmond. Her third daughter Susan married William, the 5th Duke of Manchester.

In those days nobility really knew how to party. In London, a ball and supper for 250 guests given by the Duchess of Gordon for the Duke and Duchess of York began at midnight. Dancing commenced immediately – with a short break for supper at 1.30 – and thereafter partying on until 7.30. Her son George – the Marquis of Huntly – had the honour of handling the Duchess of York from her carriage.

The balance of power was shifting in Europe. The ambitions of France led to her declaring war on Britain and Holland in February 1793 and started a conflict that was to last a generation. Alexander, the 4th Duke of Gordon, now undertook to raise his 3rd Regiment for the protection of King and country. The letter of authorisation conveyed his Sovereign's especial trust and confidence in his loyalty, courage and good conduct and appointed him Colonel of the Northern Regiment of Fencible men.

The Duke's eldest son George, the 8th Marquis of Huntly was just finishing his schooling at Cambridge and he was bent on a military career. He joined the Scots Guards and while in France his regiment received Battle Honours at Lincelles. The Marquis George (or Huntly as he became known) on his return from duty decided to raise a regular regiment of his own. The War Office gave Alexander permission to raise a regiment of a thousand men. It was understood that his son the Marquis would be its colonel. The embodiment of the 100th Reg. of Foot (later renamed the **Gordon Highlanders**) took place on the 24th of June 1794 – a red-letter day indeed at the newly built barracks at castle hill in Aberdeen. The men were recruited from nearly every county in Scotland – Inverness-shire 241 men, Aberdeenshire



118 but also from places as far distant as North Uist and Barra.

The Duchess Jane Maxwell is famously linked with the Gordon Highlanders for she recruited many a soldier – 'With a sovereign in her lips and the offer of a kiss.' The men assembled for inspection before Sir Hector Munro, the hero of Buxar. As a small test of fitness he asked every man to run 50 paces before him. There were four-teen boys aged 9-13. One of them, a nine year old Robert Watt from Banff, served continuously in every campaign until he was wounded at Waterloo 21 years later. In buoyant mood after her success, we see a hint of the Duchess's confidence or arrogance in a letter she wrote to her confidant Professor Beattie in Aberdeen. 'I still flatter myself neither the political world nor the gay one is so interesting as the history of me and mine.'

This was a red-letter time for another great Aberdeen institution, for fourteen years earlier, in 1780, the Society of Golfers of Aberdeen was formed, shortly renamed Aberdeen Golf Club. The "Royal" was not added until 1903.

The French, ambitious as ever, sought to aid their own cause by helping Irish revolutionaries, who wanted independence. Anticipating a French landing in Ireland the regiment were despatched to support the English forces. Huntly was promoted to Brigadier. He arrived at Dublin castle and declared Martial Law to curb the widespread violence. It was then, in Ireland, that the 100th of Foot was renamed the 92nd or Gordon Highlanders.

The Anglo-Russian agreement to invade Holland saw the Gordons picked as one of the regiments that made up the 4th Brigade. In Holland an enormous French column numbering six thousand men, attacked the Gordons at Egmont-op-Zee. In the ensuing three hour battle and with the unrestricted use of the bayonet they routed the French and gained their first battle honour. Huntly was among those wounded. It would be many years before the pieces of metal and debris worked their way through the flesh and his wounds stopped discharging.

With the war with France seemingly over and the treaty of Amiens ratified, Jane Maxwell with her daughter Lady Georgina Gordon joined the rest of British nobility at Dover – eager to enjoy once more the delights of continental Europe. Georgina was in need of a break for her newly betrothed, the 5th Duke of Bedford, had died of a strangulated hernia. It was while in Paris that the Duchess made her celebrated attempt to marry Georgina to Eugene de Beauharnais – son of Josephine and stepson to Napoleon. Napoleon, alas had greater ambitions for his son. In the end Georgina married her late fiancé's



The Gordon Crisis: "The Mob destroying & setting fire to setting fire to the Kings Bench Prison & House of Correction in St George's"

younger brother John, now 6th Duke of Bedford. The death of Jane's dear friend Pitt saw a new administration under the Whigs at Westminster and they appointed Bedford as Lord Lieutenant of Ireland. The Whig government lasted barely a year when it was replaced by a Tory administration and Bedford was replaced by her other daughter, Charlotte's husband, 4th Duke of Richmond. The proud Duchess of Gordon saw two of her daughters succeed each other in the vice-regal suite at Dublin Castle – quite an accomplishment.

Time passed and in May 1811 the King held a Levee at Charlton House. George, the Marquis of Huntly, attended this but there is no mention of his mother. The bright light of David Erskine's beautiful star was beginning to dim. It was while staying in Piccadilly with her granddaughter that the Duchess Jane Maxwell Gordon became ill and died. She was indeed a remarkable woman, for it was largely due to her social and political influence that there were no clearances in Gordon land.

By 1814 the war with France had seemingly ended and George the Marquis of Huntly took his new bride Elizabeth on an extended summer tour of Europe. He was so popular with the Genevois – who knew him well from the days of his tutelage – that during his stay there in January 1815 he received the freedom of the city. By the spring Huntly was making his way towards Holland keen to show his new wife the scenes of the battles he had fought there as a young soldier. From there they travelled to Brussels to visit his sister Charlotte, Duchess of Richmond, also on a European tour. Unbeknown to the couple – for news travelled slowly – Wellington and Napoleon were preparing their armies not twenty-five miles away for a battle that would decide the fate of Europe for the next hundred years. The ill-informed couple arrived on the evening of the Battle of Waterloo and the following morning Huntly rode out towards the

sounds of gunfire and cannon. Being hardly a safe place to stay he took his new bride to Ghent where a few days later they dined with the recently restored Louis XVIII.

On returning from Europe the couple extended and restored Huntly Lodge, which had been rather hurriedly built by his grandmother the Duchess Katherine. He became a familiar figure strutting into town surrounded by his dogs – two great white Hungarian wolfhounds which terrified everyone. Huntly became Colonel of the Royal Scots and like all noble families spent his time equally between London, his estates and various military duties.

In 1827 while Huntly was in Italy on a shooting holiday with the King and Prince Leopold, he heard that his father Alexander, had died aged 84. So George became the 5th Duke of Gordon. He was appointed Colonel of the 3rd or Scots Guards and attended the coronation of William IV. In 1835, on another tour of Europe and during the great review of the Prussian troops in Silesia he dined with the King of Prussia and the Emperor of Russia.

Alas George, who had stomach troubles some years earlier, began to lose weight while in Europe and not long after his return, died in London aged 66. By the King's wish he was given what amounted to a state funeral. In a procession attended by their Majesties the coffin was conveyed from Belgrave Square to Greenwich Docks and from there to Speymouth in the naval vessel "Firebrand". After four days lying in state in Gordon Castle the hearse was escorted by over fifty carriages, many gigs and about seventy horsemen to Elgin Cathedral.

Having no legitimate heir the title Duke of Gordon became extinct. The title Marquis of Huntly went to his cousin the 9th Earl of Aboyne and the estates to his sister Charlotte's son Charles George Lennox now the 5th Duke of Richmond. Death duties and the accumulation of large debts by both Huntly and his father Alexander meant that the greater part of the Gordon estates had to be sold. Much of it was bought by the crown and of what was left, Lennox sold to the tenant farmers. Forty years later Queen Victoria suggested to Disraeli, that the title Duke of Gordon be revived in the Dukedom of Richmond so Lennox became Duke of Richmond and Gordon.

The castle today has lost much of its grandeur. The wings remain but the major structures on each side of the old tower have completely gone – as too alas has the influence of the Dukes of Gordon in the Northeast of Scotland. I hope you will agree with me that the Gordons were indeed 'A Great Ducal Family'.

Obituaries

Professor Sir Donald Campbell, CBE President 1980 – 81



Professor Sir Donald Campbell, CBE, Emeritus Professor of Anaesthesia at the University of Glasgow, died peacefully in hospital on 14 September 2004 aged 74. With his death, medicine in general and anaesthesia in particular has lost one of its most distinguished practitioners whose influence spread far beyond the boundaries of everyday practice. A tall and distinguished figure, he was a pioneer in many aspects of anaesthesia, particularly the introduction of Intensive Care Units.

He was born in Rutherglen, in 1930. During the war he was evacuated to Blair Atholl where he stayed with two of his many aunts. His time there engendered in him a great love of the Highlands and its people. He also learned how to poach trout and salmon and this was the start of his lifelong love of fishing.

Returning to Glasgow he attended Hutcheson's Boys Grammar School where he received the good grounding in leadership which was to become evident in the future. In later years he became a Governor of his old school and last year received a George and Thomas Hutcheson award (a "G & T"

award) as one of its most distinguished alumni. G & T however was not Donald's drink. He much preferred whisky.

After graduating in medicine from the University of Glasgow in 1952, he completed his resident posts and then left for Canada to begin training in anaesthesia. He worked in Edmonton and in Lethbridge, Alberta before returning to Glasgow in 1956 to begin his long association with anaesthesia in the West of Scotland.

His FFARCS followed while training at the Royal Infirmary and Stobhill Hospital and he was appointed Lecturer in the University Dept. of Anaesthetics at Glasgow Royal in 1960. The following year he transferred to an NHS Consultant post which he held for the next fifteen years.

While in Canada he developed an interest in anaesthesia for heart surgery and he also noted the early development of Intensive Care Units which were associated with the concept of Progressive Patient Care. He was determined to introduce this in the Royal Infirmary in Glasgow, and with much lobbying and political skill he succeeded in persuading his surgical colleagues that this was the best way forward for their patients.

The Respiratory Intensive Care Unit was opened in 1966. Professor Campbell was its first Director and the unit is a lasting memorial to his foresight and drive.

At the same time he pursued his research interests in several areas mainly involving the development of more sophisticated ventilators, the pharmacology of new analgesic drugs and the effects of smoke inhalation on the lungs. His published work included over a hundred papers on anaesthesia, intensive care and related subjects in peer reviewed journals and he was the author of two textbooks. Internationally he was in demand as a Visiting Professor and lecturer and he was a Fellow of

several overseas colleges.

Professor Campbell always believed strongly that Health Service Departments and University Departments should work closely together and in 1976 when the Chair of Anaesthesia in Glasgow became vacant he was appointed to it and held this post until he retired in 1992. From here he was able to develop his interest in medical education and wield his influence and apply his wisdom over a wider field which was further expanded in 1987 when he was appointed Dean of the Medical School for a four year period.

The profession was not slow to recognise Professor Campbell's many contributions to all aspects of his specialty and after periods as an examiner and board member of the Faculty of Anaesthetists (forerunner of The Royal College of Anaesthetists) he was elected Dean of the Faculty for three years from 1982. Immediately following this he was elected Vice-President of the Royal College of Surgeons of England, a particular honour for an anaesthetist.

Previously, in 1977, he had been Vice-President of the Association of Anaesthetists of Great Britain and Ireland and in 1979, President of the Scottish Society of Anaesthetists.

His interest in medical education was recognised when he was appointed chairman of the Scottish Council for Post-Graduate Medical Education and as a member of the Medical Advisory Committee of the British Council he was involved in arranging attachments to U.K. Departments for many young trainee anaesthetists from overseas and also from The Royal Navy.

Already a fellow, he was elected President of the Royal College of Physicians and Surgeons of Glasgow – the first anaesthetist to hold this post. Later, in 1994, he became the first Chairman of the West Glasgow Hospitals University Trust.

In recognition of the major contributions which Professor Campbell made to so many branches of medicine, he was awarded the C.B.E. in 1987 and received his Knighthood in 1994.

Soon after his retirement he suffered a stroke and this limited his ability to enjoy his favourite sports of fishing, curling and shooting, especially fishing. It did not however suppress his enjoyment of the social scene and his prowess as a raconteur was undiminished.

While it is hard to convey the breadth of his professional achievements in print, it is impossible to do justice to his love of people, his joy in parties, his delight in others' successes, and his love of conversation which crossed every social boundary, and which is the mark of not just a good man but of a great Scotsman.

Professor Campbell is survived by his wife Kay and their two daughters, and by a son, a daughter and two grandchildren from his first marriage to Nan who died in 1974.

Dr A B M Telfer

Originally published in the Glasgow Herald on 24 September 2004 and on the RCOA website.



Greg McGregor Imray President 1989 – 90



Chairman of the North East of Scotland Society of Anaesthetists, and, reflecting his early experience of farming and his love of the north east 'doric' language, he sang a doric 'cornkister' as part of his Presidential address! He later became President of the Scottish Society of Anaesthetists, in which he retained an interest until his death.

The enormous physical and intellectual energy which Greg showed during his distinguished career was continued into his retirement years. He kept up-to-date with the latest developments in farming methods and was an avid and knowledgeable gardener. He was particularly proud of the family trout loch in Aberdeenshire which was planned and constructed under his supervision. Before retirement, Greg joined with a small number of friends from other professions to form an active discussion group which met regularly in the winter months, often debating a topic introduced by one of many guest speakers, and this interest was continued throughout his retirement. This reflected his constant search for knowledge, and in his latter years he became an expert in furniture restoration, bird-watching, and the restoration of neighbours' garden walls in which he designed and produced the semi-circular coping stones to reproduce the old designs. His most intense retirement interest was golf which he pursued with zeal and intellectual analysis in his quest for the perfect golf swing. His friends will miss his huge zest for life and his quirky sense of humour.

Greg's many colleagues and friends have expressed their condolences to his beloved wife, Lucy, and their daughter, Elizabeth, whose graduation in medicine at Aberdeen gave him enormous pride, and who was married to Dr Steve Leslie only three months before Greg's untimely death.

Dr G S Robertson, Aberdeen

Greg Imray died suddenly on 19 August 2004 at the age of 70. He was appointed as a Consultant Anaesthetist to Grampian Health Board in 1971 and retired in 1996. After graduating at the University of Aberdeen in 1957, Greg served his house officer appointments in Aberdeen and spent the next two years in surgical posts in Tasmania. He returned to Aberdeen in 1962, partly to assume temporary responsibility for his late father's farm in Aberdeenshire, and also to begin his training as an anaesthetist.

Soon after becoming a consultant, Greg established an interest in pain relief and major vascular surgery, and he had a leading influence upon the setting up of Aberdeen as the fourth centre in Scotland for open cardiac surgery. As a direct result of these developments he then became the principal advocate of the first definitive Intensive Therapy Unit in Aberdeen. In 1994 a completely new enlarged ITU was established, and in recognition of Greg's central role in intensive care a plaque was unveiled within the new unit.

As one of the team introduced to deal with major civil and industrial incidents, he was flown offshore on 6 July 1988 to the scene of the Piper Alpha drilling platform disaster. He was a former

Trainees' Prize

(Sponsored by Datex-Ohmeda)

Introduction of fasting guidelines (for fluid): Closing the loop

Parag R. Desai
Stirling Royal Infirmary



Background

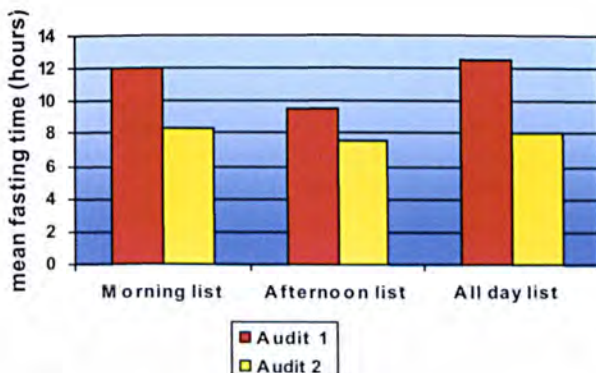
Excessive preoperative fasting, especially for fluids is associated with multiple problems. The majority of patients scheduled for surgery are inappropriately fasted. Introduction of fasting guidelines has helped to substantially reduce the duration of fasting.

Method

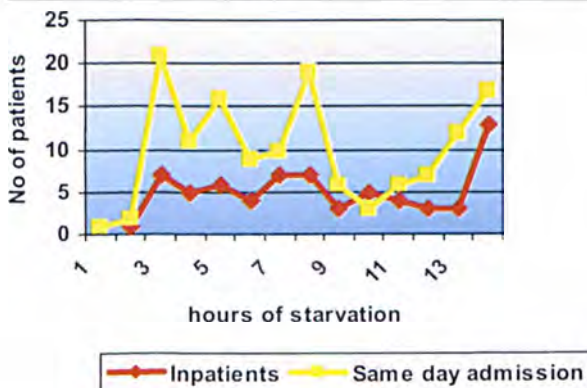
Fasting time for fluid was audited at Stirling Royal Infirmary in 2002. 117 inpatients were asked about the last fluid intake before planned surgery. The mean fasting time for fluid was 712 minutes (11hr: 53min). New fasting guidelines were introduced in response to the results. Six months later fasting time for fluid was re-audited. 69 inpatients were again asked about their last fluid intake before planned surgery. The mean fasting time was 496 minutes (8 hr: 17min). At the same time we have audited the fasting time for patients admitted on the same day.

Conclusion

The introduction of guidelines has helped to reduce the fasting times at Stirling Royal Infirmary. Continued patient and staff education is necessary to achieve the fasting times recommended by the ASA guidelines.



Audit 2:
Fasting times of inpatients vs. same day admissions



Deprivation category and anaesthetic intervention in the obstetric population

KN Litchfield*, MG Booth, SJ Young

University Dept of Anaesthesia* and Dept of Anaesthesia, Glasgow Royal Infirmary, Glasgow, UK

Introduction

Lower socio-economic status has been linked to poor health, teenage pregnancy, low birth weight, pre-term delivery and poorer maternal and neonatal outcomes^{1,2}. With these facts in mind, we hypothesised that lower socio-economic groups would utilise more anaesthetic services during labour and at time of delivery.

Method

We undertook a retrospective review of labour ward admission and delivery data at a large tertiary referral maternity hospital from January to September 2003. Anaesthetic intervention was defined as spinal, epidural or CSE insertions, or general anaesthesia. Socio-economic status was measured using the deprivation category score 'DEPCAT'³. This is a system, which assigns an individual to one of seven (1= affluent, 7=most deprived) socio-economic groups, using their postcode sector. Statistical analysis included Students t-test for parametric data and Spearman's correlation (ρ) coefficient for non-parametric data.

Results

1050 patients were identified. 52 patients were excluded for incomplete data. The remaining 998 patients were distributed as follows: DEPCAT 1=29, 2=64, 3=95, 4=161, 5=93, 6=197, 7=359. DEPCAT scores did not correlate with age, parity, gestation or birth weight. There was a strong negative correlation between elective caesarean section (ELUSCS) rate ($\rho=-0.82$, $r^2=0.68$, $p=0.023$) and DEPCAT and reciprocally a positive correlation between SVD rate ($\rho=0.96$, $r^2=0.94$, $p=0.01$) and DEPCAT. A lower anaesthetic intervention rate was strongly correlated with an increasing DEPCAT ($\rho=-0.829$, $r^2=0.7$, $p=0.018$), however when re-analysed with the elective work excluded (ELUSCS) the correlation was no longer significant ($\rho=-0.571$, $r^2=0.19$, $p=0.18$).

Conclusion

Unexpectedly, parturients in this study had a reducing anaesthetic intervention rate with increasing socio-economic deprivation. This effect is explained by the higher elective caesarean section rate in the more affluent groups. Further work is required to investigate why elective caesarean sections occur more frequently in these higher socio-economic groups.

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Intensive care patients and chronic medication – an observational study

Bloomfield Roxanna, Campbell A, Noble DW

Intensive Care Unit, Aberdeen Royal Infirmary, Forsterhill Aberdeen AB25 2ZN.

Introduction

Patients presenting to the ICU often have pre-existing conditions for which they are prescribed chronic medication. Many of these drugs have disease modifying effects and have a good evidence base for improving outcome e.g. β -blockers, aspirin and lipid-lowering drugs. With the onset of critical illness, the alterations in physiology and pharmacokinetics make it difficult or inappropriate to continue these drugs in the short term. After the resolution of the acute illness, the pre-existing comorbidities are likely to require ongoing treatment. During an ICU admission patients are cared for and discharged by other medical teams and we wanted to ascertain if such drugs are reinstated after the acute illness. We performed an observational study of the management of long term medication during and after an admission to ICU.

Methods

We conducted a retrospective review of case notes of intensive care survivors over the age of 60, admitted to Aberdeen Royal Infirmary ICU between July 2001 and January 2002. This age group was chosen to identify a patient cohort likely to be on chronic medication. To maximise clinical relevance, simple analgesics, laxatives, vitamin supplements and short-term antibiotics were excluded from the study.

Results

Of 71 patients meeting eligibility criteria, 46 were prescribed 197 long-term drugs that were continued up until ICU admission. Of these, 112 were not continued upon ICU admission. For 39 drugs there was an obvious or implied temporary contraindication. Only two drugs had a documented reason for this. 19 drugs were prescribed an alternative preparation.

Out of the 112 chronic drugs discontinued in ICU, 13 were recommenced during the patient's stay. Of the remainder, 87 drugs were not restarted by ICU discharge, with no reason documented in the transfer letter. Drugs for cardiac disease accounted for 50 of these and included aspirin, antihypertensives, antianginals and lipid-lowering drugs. Other medical teams recommenced 32 drugs by hospital discharge, 33 were not recommenced including 23 drugs for cardiac disease.

Conclusion

There is little evidence to guide our management of long term medication during an episode of critical illness. Decisions on the continuation of individual drugs therefore remain a matter of clinical judgement. This study demonstrates that chronic medication is not always reinstated after the resolution of the acute illness and in some cases this will be appropriate. However, the absence of any documentation of the rationale for medication changes raises the possibility that this represents an error of omission rather than an active clinical decision. There is potential for disease or symptom recurrence from the inadvertent cessation of effective drug therapies. Processes in ICU should be developed to minimise this risk and improve communication between different medical teams.

Observational Study Of Postoperative Analgesia Following Paediatric Day Case Dental Extractions

P. Polovinkine SpR

Department of Anaesthesia, Edinburgh Dental Institute and the Royal Infirmary of Edinburgh

Summary: The day case unit at the Edinburgh Dental Institute has traditionally used paracetamol along with dental infiltration of local anaesthetic for analgesia following paediatric dental extractions under general anaesthesia. Ibuprofen has recently been formulated for paediatric use. In an observational study looking at 200 patients, we compared the two drugs. Pain relief immediately after surgery reliant on local anaesthetic infiltration before oral analgesia is effective remains problematic with acceptable analgesia only being attained in 45% of patients. At home, both paracetamol and ibuprofen are effective for pain control after simple dental extractions. Despite verbal and written instructions about postoperative analgesia, there is a high incidence of non-compliance with analgesia. Analgesia in the non-compliant group was worse, with 38% patients having slight pain compared with 7.3% in compliant group. The incidence of post-operative nausea and vomiting in both

groups was low: 2% in recovery and 0.5% at home.

Acknowledgments

Dr V Clark, Consultant anaesthetist, Staff Nurse Tara Catt, the dentists, nurses, ODP and anaesthetists of the Day Case Unit, Edinburgh Dental Institute.

MRSA Infection Acquired in Intensive Care – A Prospective Study of Infection and Outcome

C MacNeil ; E Curran ; J Kinsella ; M Booth
Glasgow Royal Infirmary,

MRSA was first described in 1961 and has been associated with increasing health care associated infection and chronic ill health. This study was designed to examine the relationship between mortality and intensive care acquired MRSA infection. Between the years 2000 - 2002 retrospective data were collected from the intensive care database (Wardwatcher), the infection control database in our hospital and the regional MRSA reference laboratory. ICU acquired MRSA infection was defined as MRSA infection diagnosed after 72 hours in ICU. Any patient in whom the source of MRSA was questionable was included in the group where MRSA acquisition was attributed to ICU.

During the period of the study 1107 patients were admitted to intensive care. 12 patients without valid APACHE II scores were excluded from the study. The rate of ICU acquired MRSA infection was 5.8%. In the general ICU population the mean length of stay was 6.1 days. In the group with ICU acquired MRSA infection the mean length of stay was 17.1 days. The mean time at which MRSA infection was acquired in ICU was at 8.9 days.

Patients with ICU acquired MRSA infections were compared to the general ICU population. Both groups had a mean APACHE II score of 22.5 and comparable mean predicted hospital mortality rates - 42.6% (MRSA group) and 42.2% (general group). Mean actual hospital mortality was 40.9% in the MRSA group and 41.6% in the general group.

In our unit acquisition of MRSA infection during ICU stay does not affect ICU outcome or hospital mortality. MRSA infection occurs in patients who have longer than average length of stay in ICU.

Grumpy Old Anaesthetists

by Henry Robb

In his rendition of "Great Beyond" Michael Stipe makes repeated reference to "...pushing an elephant up the stairs" - a simple yet complex metaphor. If Michael Stipe was pondering on the problems within the NHS when he wrote this song there are several flights of stairs and a number of elephants he may have had in mind.

We are all aware of barriers that either impact on our delivery of care or mess up our lives - some imagined, some real. Some face more than others. I've just spent the afternoon culling 250 applicants for an SHO job down to the half dozen or so required for the final hurdle. Most were from overseas, few had any experience in anaesthesia and the majority either undertaking clinical attachments or working in unrecognised posts. Thankfully I will never have to face the barriers these doctors do. This is not a race issue; it simply reflects the ignorance of a government who (despite denials) are canvassing far and wide for doctors - without an understanding of what the NHS currently needs; judgement safe practitioners, capable in their chosen specialty. But more of that later.

This issue has been raised in several BMA Committees. I have an involvement in some of these through the LNC. It has been interesting watching the cogs turn and the wheel that is the BMA grind slowly forward with only the odd hiccup - generally when remuneration is to the fore. My first real experience of this was the concerns raised when "Intensity Supplements" were mooted and it became apparent that some might be considered to be working less intensely than others. Initially it was those who considered themselves at the less intense level of the spectrum that complained the most. However in the end it required considerable ingenuity by those who felt they functioned at the opposite end of the spectrum to achieve the financial recognition they believed appropriate.

Around this time they made the mistake of negotiating the "New Deal". The only real question here is which "they". The government "they" clearly had no insight into how hospitals were staffed and paid an exorbitant penalty for this naivety. The other "they" clearly negotiated a deal suitable to themselves with little thought as to how things might pan out in the future. Certainly, the new deal was financially rewarding for a few years. However they now have their house in order, rotas are established within the boundaries of the agreement and shift working (the obvious solution) is established. The

boot is on the other foot; training is in jeopardy and discord at an all time high. I do empathise with those trainees who are currently suffering the consequences of these negotiations - at least those who missed the financial perks. Unfortunately the staunch defence by BMA News Review and Hospital Doctor of on-call facilities does not quite gel with the demands that being resident "on-call" but asleep equates with work. Hopefully a revision of the WTD, in light of SIMAP and Jaeger, will in some situations allow a return to on-call patterns. This revised WTD might offer the JDC "they" a second bite at the cherry. Hopefully slightly more thought will go into the process this time and a longer-term view of the service will be considered.

With their treatise on fatigue the AAGBI have thrown a separate lifeline. Like most publications of this type it is a two-edged sword and will be equally at home in the courts acting for the prosecution - "So tell me Doctor, if you had followed your own Association's advice and not attended that party the night before you were scheduled to be on call..." It's out now, what defence can we put forward? We might attempt ridicule or perhaps our basic human rights: to achieve the required two good nights sleep before working will require all anaesthetists to ensure they are nice and early to bed having had their supper and last drink soon after they arrive home each night. Except of course for those Fridays prior to a "free" weekend (free except for the requirement of attaining the two good nights sleep before Monday!). Early to bed might appeal to some. I would caution that we still require confirmation of *what* constitutes strenuous exercise and whether the bedroom may be associated with both carnal activity and sleep. Guidelines are one thing but this goes too far. No doubt "Anaesthetists and the need for a healthy breakfast" will land on your doorstep soon. Unfortunately, as I am not currently a member I am unable to voice these concerns - any takers.

One thing I am sure about is that Trusts, in general, will not accept this as a basis for retaining on-call rooms. After all, we are not the only "shift" workers in the hospital. I would look to a revised WTD rather than the Association on this one. I'm told we should be negotiating triple rates to cover trainees who catch the plague prior to their on-call - sorry, night shift. It is worth remembering that shift work, Hospital at Night and other changes in service delivery will mean that those interested in partaking in this lucrative activity might find themselves to be *working* - a somewhat onerous task after a full day at the grindstone. Suffice it to say that finance is only one aspect of the negotiation and care will be required to reach a workable agreement. In the meantime, I am one of the lucky few who has "shift maladaptation syndrome" and will be unable to contrib-

ute should this scenario arise. The rest of you will have to wait until 2009 when it will be illegal to opt out of the WTD, the hospital will have to close and the patients be transferred to a unit with more resilient trainees.

Part of the problem here is Hospital at Night – or at least one of its possible implementations. Hospital at Night should not be read. It's too depressing. Put simply the anaesthetic "we" may find it's off supporting the less experienced other "we" at night. Mind you, I do like the idea of underpinning this project with "Consultant and Senior Nursing leadership by day". It's a shame that the leadership doesn't seem to apply to those consultants expected "to provide theatre cover" overnight. You will, of course, get compensatory rest. Whether this will or will not be paid is debatable. Doubtless those providing leadership (during the day) will be able to include this in any application for discretionary points or B merit awards. This activity will not count towards A merit as you must be absent from your place of work for 98.3% of the year. These are clearly rewarded for other activities – perhaps collecting air miles. For those doing the night work, it's worth remembering that discretionary points are awarded for "above average contributions"; the time at which clinical activity is undertaken is not a factor. I mention this, as the rules of engagement (for discretionary points) seem not to have been widely read. So, some advice: first sell your soul – whether to the Association, the BMA, the College or similar is irrelevant. A set number of points are available for each "section" of the form and you most certainly do not need 7 clinical sessions to hit the maximum clinical points available. Second, sell yourself. While prostitution is abhorrent to many, it's the key to success in this enterprise. Third, sit on the panel or speak to those that have. Failing that, speak to those who have been successful. It's always worth knowing the rules at the outset. This is why many of us passed the exam on our second attempt and you are not allowed to be an observer until you have passed.

Research was useful stocking filler. Although the Australian journal is still available as a last resort for publication, research is dying a slow death at the hands of the EU and their demands for a legally accountable sponsor. What other commodities are available? National Anaesthesia Day (NAD) for one. For years the dark secrets of big syringe and little syringe, of white gas and blue gas have remained just that, secrets. For too long have we stood in the shadows, hiding behind our Boyle's machines, watching enviously as our surgical colleagues bask in the glory of success and the courts of failure. Let's use NAD as the catalyst. Let's move out of the shadow and into the light. It's time the public knew we were there as well. Let's take our share

of the blame. No? Well, do NAD anyway, it's useful as it can be considered as a National Activity (if you've no Association association), Public Education (an interesting little earner when used correctly), an Innovation (if not used before) and so on – stick it in the form and get some points, get some money.

Other problems are out there. Temple has reported. I note the Public also includes patients although I'm concerned that the other public (excepting MPs, MSPs and MEPs) appear not to attend their (public) meetings or express opinions. Of more interest to trainees is the concept of becoming both "judgement-safe and competent" in their "field of specialist practice". The only important bit is the definition of "field". While the BMA may disagree, I think field might best be defined as "five to nine" and doing the "little stuff which I can't be bothered with". On the down side (for the establishment), is the likelihood that once judged safe and competent they will be able to practice outwith traditional NHS boundaries – and perhaps canvas for business at the "Golden Nugget". Tied to this is the Foundation Programme – two more years of education tagged onto the first five. The more cynical may see this concept developing into sixth year at medical school and a new name for the current JHOs. I certainly can't see why Trusts will want to pay the salaries required for the service commitment offered.

So are we trotting down the road to despair. Just like Britain in 1939 the NHS appears to be up against the wall. Solutions. Well money doesn't seem to have worked. I think we all (I) believe we are worth far more than we are paid anyway. Goodwill has gone and might be difficult to buy back. Once you've taken away the free coffee and other perks their return will simply be viewed as a cynical attempt at bribery. Change is certainly needed and some measures are urgent. It's a shame that some of those who should know better are currently manning (and womanning) the barricades. There are simply not enough "judgement-safe" medical hours available to continue the service as is. As a profession we should be putting forward this simple argument not gibbering on about centralisation for safety. We all know that the more patients we put in reach of the professors the greater the risk. We should not be supporting the status quo and, as a group, we should not be supporting where services are centralised but rather how they are centralised. Whether your hospital or mine (which will) close is not a medical decision. What medicine should offer are workable models of care. Let the politicians and those who wish to be involved with this self-interested subset of humanity choose where services should be situated. What we need to get across is that the twin headlines – the first demanding that closures stop and the second that services must be im-

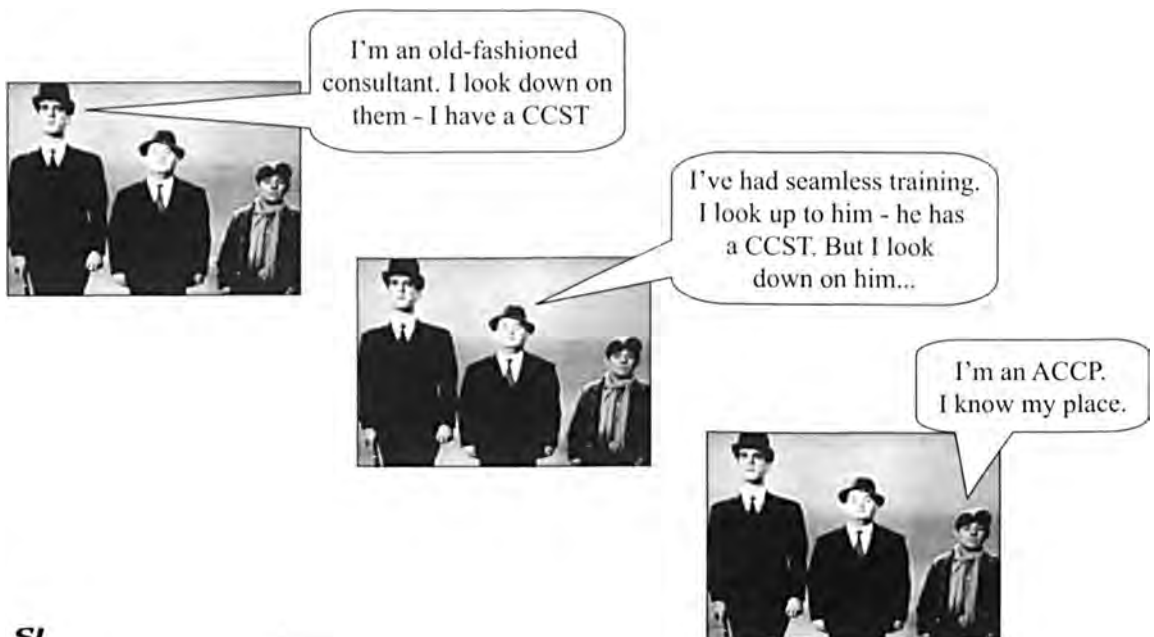
proved to prevent a "similar" tragedy due to inexperience – are simply not compatible. Which do the public want?

I'll soon move onto my fifth major management configuration in twelve years - Directly Managed Unit, Trust, Combined Trust, Board and soon CHIPS. Complain as much as you like but ensure you are not seen to stand against this NHS gold standard of progress. The government know best and, more importantly, pay my salary. I am now on my eighth or ninth Chief Executive – it's hard to keep count. At the end of the day I still enjoy gassing the odd patient. I speak to colleagues in all specialities. I find it enjoyable to moan about the surgeons while in the company of physicians, rail about the physicians when speaking to orthopods, castigate the orthopods while with the haematologists and so on. What I have noticed is that each clan thinks it works harder than the others. I have no doubt there are lazy anaesthetists, there are also lazy physicians, geriatricians, surgeons and so on. However, most of us do work hard and offer a reasonable bang for buck but do it in different ways. As anaesthetists we are often in outwith normal hours but we don't work the extended day of many physicians or have to sort out twenty plus emergency admissions the next day. Unlike surgeons we hand on problems and don't have to fit in that extra laparotomy or add yet another "urgent" referral to an

overloaded clinic. And so on.

Lighten up. Get a dog. Switch from Eminem, the news and other rappers of despair and start the day on a good note with Louis Armstrong's "Wonderful World" or something rousing like Mussorgsky's "Pictures" or ELPs "3rd Impression". At the end of the day the best way of surviving change is to work in a tight knit department and have good relationships with your non-anaesthetic colleagues – even the spiteful, vicious, mean and malicious. Talk and, dare I say it, work with management – preferably as a group. It's hard to predict where it will all end up – perhaps a centre of excellence in Larbert and the development of an effective ring of outlying DGHs in Glasgow, Edinburgh, Dundee and Aberdeen. Whatever, working together it might just be possible to push that elephant up the stairs to the next floor.

The author does not agree with all the sentiments expressed and wishes to apologise to professors and any other person or group who believe they work hard and do a good job. Should you find the punctuation to be of an unacceptable standard, contact Lynne Truss.



Guest Lecture



The Role of Cardiopulmonary Exercise Testing in the Evaluation of the Surgical Patient

Monty Mythen

Portex Professor of Anaesthesia and Critical Care and Helen Luery, Research Fellow,
Centre for Anaesthesia, University College London

The objective of preoperative evaluation is to provide information on the ability of the patient to respond to the increased metabolic demands intra operatively and during the postoperative period. A useful preoperative test will help triage the patient according to operative risk and will help direct treatment in order to improve postoperative outcome. This test should be cost effective, readily performed on all patients and simple to interpret. It is suggested that preoperative risk assessment should include evaluation of surgical risk, the functional capacity of the patient and patient specific risk (Chassot et al 2002).

Traditionally such assessment of patient specific risk has focused on detecting and quantifying ischaemic heart disease and cardiac failure. Shoemaker et al (1972) found that the inability to increase cardiac output postoperatively was associated with increased mortality, this was also found some years earlier by Clowes and Del Guercio (1960). In addition, Shoemaker (1988) showed that maintaining mean cardiovascular parameters in surgical patients was associated with improved outcome. Patients with unstable coronary syndromes,

valvular disease and symptomatic arrhythmias (Goldman 1983, Goldman et al 1977 and Detsky et al 1986) as well as cardiac failure (Goldman et al 1977 and CEPOD 1997), have all been shown at increased risk of perioperative complications.

Ischaemic heart disease and cardiac failure has, until now, been detected using a combination of comprehensive medical history and the results of tests such as resting electrocardiogram, cardiac echocardiogram, angiogram, thallium scans and stress tests (dobutamine and exercise). These tests can provide useful information on underlying pathophysiology, but tend to be limited in their ability to quantify the impairment associated with it.

Fleischer et al (1996) suggest that non invasive screening for cardiac disease in non cardiac surgery is not predictive of post operative risk in low risk groups due to a high rate of false negative and false positive results; although it is suggested that the use of cardiac testing in moderate and high risk groups is cost effective. However, can patients be triaged into different risk categories?

ries, if standard physical examination has been found to be ineffective in identifying 23% of patients with severely compromised cardiovascular systems (Clowes and Del Guercio 1980)? In a recent article by Grayburn and Hillis (2003), it was suggested that the positive predictive value of non-invasive tests is uniformly low and that they do not provide information beyond that obtained by simple clinical risk variables. Chassot et al (2002) suggest that no test adequately mimics the physiological stress response to surgery: prolonged sympathetic stimulation, tachycardia, increased cardiac vasomotor tone, hypercoagulability, potential atheromas, hypothermia and blood loss are all described. In a study by Older and Smith (1988) it was shown that major surgery was associated with an increased resting oxygen consumption (VO_2) of up to 44%. For this increase in VO_2 to be maintained, the patient must be able to increase oxygen delivery (DO_2), which, is dependent on not only cardiac output but also the adequacy of the lung, the pulmonary circulation and the peripheral circulation. Therefore any preoperative assessment should be capable of detecting any insufficiency in these systems.

The American College of Cardiology/ American Heart Association guidelines (1996) stated that one of the strongest and most consistent prognostic markers identified in exercise testing is maximum exercise capacity or functional capacity, which is at least partly influenced by the extent of resting left ventricular dysfunction and the amount of further LV dysfunction induced by exercise.

Wasserman (1993) suggests that functional capacity or exercise tolerance is related to post operative outcome, since, oxygen cannot be consumed by the cells unless adequate oxygen is delivered. If the oxygen demand cannot be met by the cardiovascular unit (as seen when exercising anaerobically) there is an increase in cell and blood lactate, a decrease in HCO_3^- as it buffers the lactic acid and a subsequent rise in VCO_2 relative to VO_2 (figure 1). Exercise cannot be maintained indefinitely at this level. Older et al (1999) suggest that the same concept can be applied to the hypermetabolic postoperative period. If an imbalance between oxygen demand and oxygen delivery occurs as a result of any impairment of the cardiovascular system, then cellular function will be impaired resulting in an increased likelihood of postoperative mortality. Therefore by testing a patient's exercise tolerance in an objective and quantitative manner the ability to respond to metabolic stress is also being tested

Measurement of preoperative functional capacity has focused on patient reports and on ECG stress testing, during which a prediction of work rate is made in the form of metabolic equivalents (METS). This is a multi-

ple of a presumed resting metabolic rate. Other methods include the use of step tests and walking tests to estimate functional capacity. Tests using a protocol involving stair climbing to volitional fatigue has been found to be predictive of post operative complications in respiratory patients undergoing thoracic surgery (Brunelli et al 2002 and Brunelli et al 2004) and thoracic and intra abdominal surgery (Girish et al 2001).

However, in these studies, exercise tolerance has either been predicted using a stair climbing test or has been described as number of flights of stairs climbed. Although these tests show a good predictive ability, they rely on estimations, which are just that: estimations. Additionally, these measurements are based on values measured during a weight bearing exercise protocol. Subsequently someone who is overweight will be working harder at the same work rate, since they must carry additional bodyweight. As a result of this, their exercise tolerance may be underestimated during weight bearing exercise. In addition, predicted maximum tolerance tests often utilise a measure of weight; it is often the case, that additional weight is presumed to equate to a higher functional mass therefore, expressing results as percentage of predicted values often results in discrimination of the overweight patient. Subsequently inaccuracy and false positive and false negative results become more probable.

Furthermore, some commonly used prediction equations use a sub-maximal heart rate measurement and age predicted heart rate in order to extrapolate predicted maximum oxygen consumption (VO_2 max). This is based on



Figure 2: A standard Cardiopulmonary Exercise Test: The patient breaths into a mouthpiece which is connected to a metabolic cart that converts a voltage signal into breath by breath data. The cycle ergometer is electronically controlled to gradually increase work rate in a ramp wise fashion. Heart rate and rhythm is also continuously monitored using a 12 lead ECG.

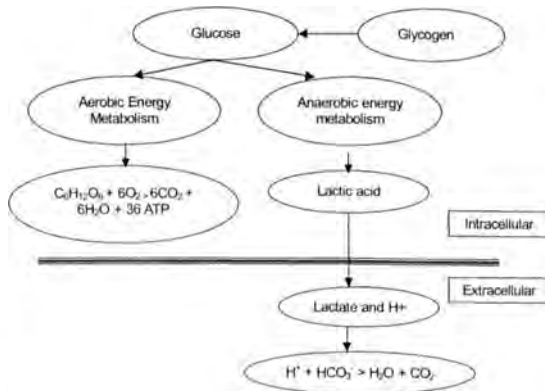


Figure 1: Metabolic pathway during anaerobic energy metabolism.

Aerobic energy metabolism results in a ratio of O_2 to CO_2 of 1. Anaerobic energy metabolism results in a disproportionate raise in CO_2 relative to VO_2 and subsequently a ratio of greater than 1.

the assumption that there exists a linear relationship between VO_2 and heart rate during incremental exercise. In patients with severe lung or heart disease, this relationship is not linear and often these patients will not be able to attain age predicted maximum heart rate, so VO_2 max may be over estimated.

Age is often used as a means of estimating functional capacity. In a study of 187 elderly patients there was no significant difference between age groups from 60 to 85 years of age in exercise tolerance (Older et al 1993). This was confirmed in a subsequent study of 548 patients (Older et al 1999). Age itself is a risk factor for surgical mortality, however, each individual ages at a different rate, therefore, chronological ageing is not the same as physiological ageing (Wasserman 1993). It therefore seems that an accurate measure of functional capacity has yet to be identified for preoperative risk assessment.

Cardiopulmonary Exercise Testing (CPX) is now perceived as the "Gold Standard" for the assessment of cardiopulmonary function by organisations such as the American Heart Association, American Thoracic Society and the American College of Chest Physicians and it is recognised as one of the few resources available that can measure integrated cardiopulmonary and skeletal muscle function as well as functional capacity.

CPX involves the measurement of expired gas during a graded exercise test, normally performed on a cycle ergometer (fig. 2). Variables measured include oxygen consumption, CO_2 production, ventilation, end tidal

oxygen and carbon dioxide and tidal volume. These variables are used to calculate additional variables such as O_2 pulse, ventilatory efficiency of oxygen and carbon dioxide and Respiratory Exchange Ratio. This data is then used for bivariate graphical analysis, which makes it possible to relate the rate of change of one variable with the rate of change of the other variable. In addition a simultaneous, continuous 12-lead ECG is monitored and recorded, as well as oxygen saturation by pulse oximetry. Thereby allowing standard stress ECG interpretation to occur.

CPX testing has a very low complication rate: the incidence of mortality is as low as 2 to 5 deaths per 100,000 exercise tests (American Thoracic Society / American College of Chest Physicians 2003) and this risk may be reduced even further if sub maximal tests are used. Older et al (1999) admitted just 3 patients for myocardial ischaemia in 8 years of CPX testing.

The use of CPX is not limited to the measurement of respiratory function as is often presumed the case. CPX testing informs on the cardio-respiratory circulatory and metabolic function of the whole body. In order for an individual to exercise, the exercising muscle must replenish adenosine triphosphate (ATP). If exercise is to continue for longer than approximately 30 seconds, oxygen is required to facilitate oxidative phosphorylation. An ability to increase VO_2 is dependent not only on the characteristics of the exercising muscle but also on DO_2 . Adequate oxygen delivery is dependent on appropriate vasodilatation and vasoconstriction, adequate peripheral circulation and the ability to increase cardiac output, pulmonary circulation and ventilation. Therefore exhaled gas at the mouth provides useful information on not only respiratory pathophysiology, but also the adequacy of the cardiac, circulatory and muscular/ metabolic systems. If any of these physiological units fail to respond appropriately then exercise tolerance will be compromised and, since, these responses are very tightly coupled, a clear alteration in the relationship between variables can be observed using bivariate analysis (Wasserman et al 1999).

In addition to informing the clinician of the factors contributing to a low exercise tolerance, CPX can accurately measure the degree of functional limitation in patients by measuring internal work (oxygen consumption) directly. The most common measures used are maximum oxygen consumption (VO_2 max) and Anaerobic Threshold (AT).

VO_2 max is defined as the maximum ability to take up and utilise oxygen and is measured by identifying a plateau in oxygen consumption despite further increases in work rate. In other words, the individual cannot physically increase their oxygen consumption so the extra

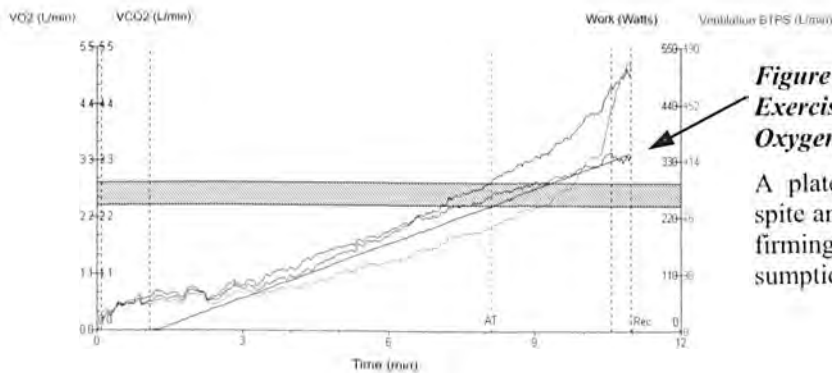


Figure 3: A Cardiopulmonary Exercise test showing Maximum Oxygen Consumption:

A plateau in VO_2 is apparent despite an increase in work rate confirming Maximum Oxygen Consumption has been attained.

mechanical energy requirement is met using entirely anaerobic energy metabolism. At this intensity of exercise the subject will only be able to continue exercising for approximately 30 seconds (fig. 3) (Wasserman et al 1999).

AT is the point at which oxygen supply cannot keep up with demand from the exercising muscles resulting in the significant contribution of anaerobic metabolism to ATP resynthesis, this is usually measured using a combination of the V-Slope method (fig. 4) and is confirmed by changes in other variables such as the respiratory exchange ratio and ventilatory efficiency and end tidal values for O_2 (fig. 5). At AT the subject will begin to feel a little short of breath and for most healthy subjects it is similar to the feeling associated with climbing just 2 or 3 flights of stairs.

During aerobic energy production VO_2 remains in proportion with VCO_2 . When anaerobic metabolism begins to contribute significantly to energy production, it results in an increase in cellular and blood lactate. HCO_3^- levels decrease as it is used to buffer the lactic acid. As a result of this reaction, excess CO_2 is produced in addition to that produced during aerobic metabolism. This

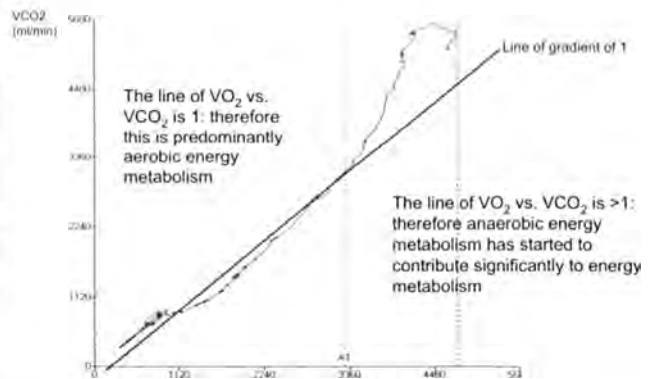
CO_2 is exhaled at the mouth. Subsequently at the point anaerobic metabolism begins to contribute significantly there is a change in the gradient of the line of the graph of VCO_2 against VO_2 from a line of one to a line greater than one. The breakpoint of the line from a gradient of one is the AT as measured using the modified V Slope method (Sue et al 1988).

Values for normal populations are well described for both VO_2 max and AT as well as normal exercise responses (Wasserman et al 1999). In addition studies have established guidelines for grading the severity of illness, prognosis and acceptance on to transplantation lists using CPX parameters in several patient groups.

For example peak VO_2 and Anaerobic Threshold have been found to be strong prognostic markers in heart failure patients (Myers et al 1998 and Gitt et al 2002), cystic fibrosis (Moorcroft et al 1997 and Nixon et al 1992) and in hypertension (Pardaens et al 1996).

CPX testing has an advantage over predictive exercise tests as it provides an objective measure of the patients' ability to perform internal work in response to metabolic stress. This can either be in the form of increased meta-

Figure 4: The V-Slope method of determining anaerobic threshold. During aerobic energy metabolism the line of VO_2 against VCO_2 will be equal to 1. At the point that anaerobic energy metabolism begins to contribute significantly to energy metabolism the line will have a gradient greater than 1. The breakpoint of this line from a line of 1 is the anaerobic threshold. This point is marked by the green vertical line.



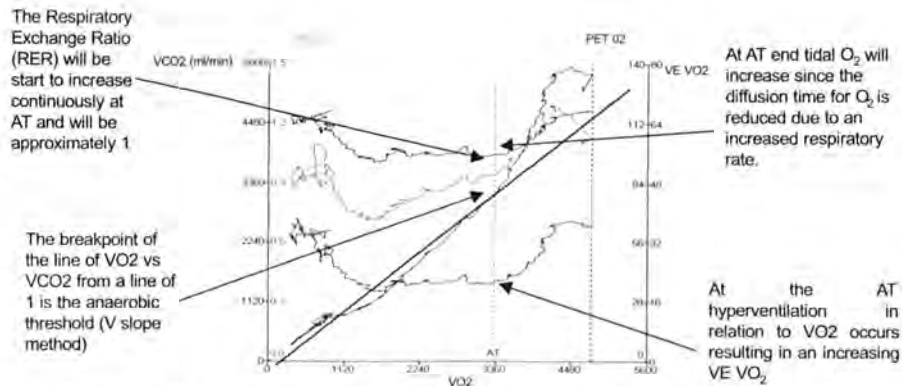


Figure 5: Four point confirmation of Anaerobic Threshold (AT)

bolus demand post operatively or mechanical work during exercise. Measures from CPX testing have been found to be highly predictive of post operative mortality.

In a study of oesophagectomy patients by Nagamatsu et al (2001) the only predictor of postoperative cardiopulmonary complications was VO_2 max. Villani et al (2003) also demonstrated that with the progressive decrease in VO_2 during symptom limited exercise tests was a progressive increase in the frequency of postoperative mortality in a group of 150 pneumonectomy patients.

VO_2 max is motivation dependent and requires a large expenditure of energy in patients who often do not exercise regularly. For this reason, symptom limited tests are often termed VO_2 peak. VO_2 peak differs from VO_2 max in that a plateau in oxygen consumption is not evident at the end of the exercise test (figure 6). This can mean that it is difficult to assess whether the patient has made a maximum effort and therefore whether the VO_2 peak is low due to onset of symptoms or lack of motivation.

Anaerobic Threshold is independent of the motivation of the patient and occurs well before VO_2 max and, since, this measure does not require high levels of physical stress, it should result in the inclusion of patients who it may not have been able to test readily or accurately. In a study by Older et al (1993) in elderly patients undergoing major intra-cavity surgery the AT classifications for severity of cardiac failure presented by Weber and Janick (1986) were used. This study demonstrated that when AT was greater than 11 ml/min/kg the chance of survival from major surgery was 99.2% but if the AT was less than 11 ml/min/kg coexisting with myocardial ischaemia, survival was 58%. It was concluded that in the absence of cardiac failure (an AT of >11 ml/kg/min) as measured by CPX, ischaemia was not a potent cause of mortality in major surgery. Overall mortality in this study was 5.9%.

In another study by Older et al (1999), patients were triaged to the ward, HDU or the ICU according to AT, the presence or absence of ischaemia and by the severity of the stress response expected as a result of surgery. No cardiopulmonary deaths occurred in those patients

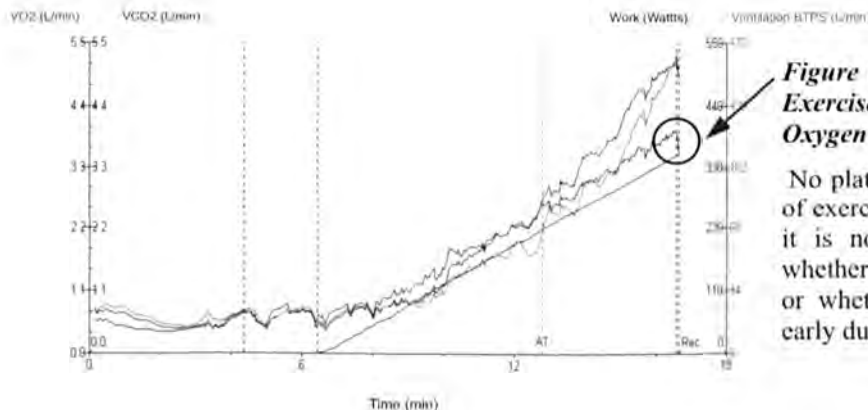


Figure 6: A Cardiopulmonary Exercise test showing Peak Oxygen Consumption:

No plateau is present at the end of exercise in VO_2 , subsequently it is not possible to ascertain whether this is a maximum effort or whether the subject stopped early due to a lack of motivation.

deemed fit for surgery by CPX testing and that were sent to the ward. Overall mortality was 3.9%.

A CPX test is simple for the patient to perform, is non-invasive and can be completed by virtually all patients (the test involves pedalling on a cycle ergometer for approximately 10 minutes whilst breathing through a mouthpiece). Furthermore, the cost of performing a CPX is lower than an exercise echocardiogram and dobutamine stress test and is considered to have greater relevance to post operative survival (Older et al 2000). Therefore CPX testing is a useful preoperative test that could provide the clinical care team with information that could direct treatment in an objective manner.

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Trainees' Meeting

Halbeath, Dunfermline, May 28th 2004

Ewan Jack, Research Fellow, Glasgow Royal Infirmary

This meeting seems to get better every year. In the past three years the attendance has increased and the quality of content has been raised. This year there were four sessions mixing a fabulous variety of subjects, interspersed with breaks to view our supporting trade stands, poster presentations and some quality coffee.

We kicked off with a review of recent advances in the field of burns management from John Kinsella of Glasgow. John's humour allowed the seamless presentation of personal safety as well as the secret hints to avoid clinical disasters especially the ever present reminder of early intervention in airway management. Nick Sutcliffe from the Golden Jubilee in Clydebank followed with some well structured arguments for using TIVA including some pharmacokinetics that were eloquently demonstrated with some excellent interactive audio-visuals. Never one to shy away he ended with a significant note of controversy about the disposal of unused propofol.

The second session was about education. There were presentations from Ronnie Glavin suggesting the use of the clinical simulator for obstetric anaesthetic training and Jonathan Edgar from Hairmyres hinting that our futures will involve workplace assessment of our non-technical skills. These are known to be implicated in a huge proportion of medical errors resulting in some 100,000 deaths per year in the USA. Although most of us agreed that some form of this would be beneficial the consensus was that this is still a very aspirational aim.

Lunch was of a standard usually reserved for quality restaurants and was certainly appreciated by all.

The traditional post lunch session looked like a miscalculation by the organisers: a lecture about exponential processes when we are usually a tad sleepy. Our fears were allayed, however, when Dr Nicholas Fauvel from London gave, what many of us believed was impossible – a tutorial on all forms of exponential functions without a single mathematical equation! For anyone who didn't have their Primary exam they now have no excuse not to pass. Dermot McKeown from the Edinburgh

transplant team followed with an insight into the relatively specialised field of liver transplantation. From the basics of a quality 'BFD' prior to surgery to the progress into living donors we were educated and certainly entertained.

After a last look at the vast array of posters and trade stands we settled into the final session on the constantly expanding area of pain medicine from Mike Basler of Glasgow and Prof. Ian Power of Edinburgh. They successfully convinced two or three of us (*so many?* - Ed.) that pain really is a challenging job combining the skills of at least eight different specialties.

Drs Benulyatt and Ledingham from Edinburgh won the poster prize with their look at the quality of anaesthetic records nationwide. The judges had a tough job choosing from the 14 entries which explored themes from postop hypothermia to how to open pre-filled syringe boxes.

At the conclusion of the proceedings we chose a new trainee representative to replace Bernhard for the next three years. Choitti Guha from Glasgow won the vote having seemingly brought her supporters club with her from the West. After this about 30 of us invaded the heart of Dunfermline to be delighted by the fantastic meal which rounded off a most enjoyable and productive day. We said our goodbyes to old and new colleagues and jumped into the minibus back to Glasgow - flawless organisation to the last!

On behalf of the nearly 50 trainees who attended may I say a heartfelt thanks to the organisers Bernhard Heide-mann and Kerry Litchfield as well as all the Chairmen and speakers of the day. It has been mooted to alter the format of this meeting so that it could act as a prologue to the Peebles meeting, whatever the result as long as the ongoing enthusiasm can be kept then the future of our trainees' meetings looks very bright indeed.

Finally, a word of thanks to the Society, for continuing to support all of us in our early years of training.

SAGA tours - Sun and Guns for Anaesthetists

Three recipients of Society grants tell us of their adventures helping out in the Third World

Anaesthesia in Dili, East Timor

Alan R Thomson, Aberdeen



Sometimes a change is as good as a rest. Sometimes it is good to be able to view life at home from a distance. Working in the developing world is certainly a change and the perspective gained is useful when faced with the shifting sands of today's NHS.

With this in mind I set off to East Timor, a tiny country with a tragic recent past which has (hopefully) emerged from 25 years of darkness and taken its place amongst nations.

Some historical background

Timor, on the south-eastern fringe of the Malay Archipelago, was minding its own business until the 1600s when Portugal and Holland colonised the eastern and western ends of the island respectively. Portuguese rule did little other than facilitate the stripping of East Timor's sandalwood forests and add a thin veneer of Catholicism to the animist beliefs of the islanders. There was little development outside of the capital, Dili, and even that city remained a rather sleepy backwater.

Fast forward to Portugal, 1975, when the dictatorship of Arturo Salazar was ousted in a coup and the new socialist government "freed" all colonies. The Timorese had had little experience of the political process and unfortunately events degenerated fairly quickly into a low grade sort of civil war between those wanting to join Indonesia and the independence movement, Fretilin.

Invasion

Suharto saw the opportunity, and was given the green light by the US and Australian governments - Fretilin was leftist and the cold war was at its height. After brief resistance to the invasion East Timor became Indonesia's 27th province in 1976.

Indonesian rule was marked by brutal oppression, forced population movement and many atrocities, notably the Santa Cruz massacre in 1991, filmed by a UK journalist, which first brought attention to East Timor's plight. It is estimated that 150,000 died during the occupation, either killed or starved. The current population is about 800,000.

Independence

International pressure finally forced a referendum in 1999 when the Timorese, despite violent intimidation, voted overwhelmingly for independence. Subsequently the Indonesian army and their militias went on a murderous rampage, killing hundreds and destroying 75% of buildings in the country. Only a UN intervention force halted the violence.



No guns in theatre -
anymore...

Since then foreign aid has poured in. Whether the international community feels some sort of collective guilt at having turned a blind eye to 25 years of atrocities is a moot point, but undoubtedly Australia (oil revenue from the Timor gap), the UK (arms sales to Indonesia) and others have contributed massively to recent redevelopment.



Theatre block,
Hospital Nacional, Dili

Work in East Timor

The Australian government currently funds a full-time Anaesthetist and Surgeon at the Hospital Nacional in Dili. Though these posts have generally been occupied by Australian consultants, recruitment for longer placements has proved difficult - I was appointed partly because I was able to commit to three months.

The government hospital was mercifully one of the few buildings in the capital to escape the wholesale destruction following the referendum in 1999, and was refurbished by the Red Cross. Two operating theatres service 50 surgical beds and there are around 2000 deliveries per year.

Job description

The remit of the post was two-fold: service provision and capacity building. Anaesthetic cover was provided each working day and on a 1 in 2 basis out of hours. The workload was varied and challenging at times - in my first fortnight I saw my first three patients with ruptured uterus.

For me the most difficult cases clinically were the

occasional neonates, though the depressingly regular dead babies (mal-presentation, undetected anaemia, prolonged and obstructed labour etc.) and occasional dead mum (eclampsia, haemorrhage, malaria) presented a much harder kind of challenge. I was directly involved in approximately 200 anaesthetics, 43 in children under 10 years old and 7 for infants less than 1 year old. There were roughly 50 Caesarean Sections.

There was a Boyle's-type Machine and developed-world type monitoring, gifted by Australia. However, maintenance has been a big problem and much of the equipment was simply inappropriate for use in such a poor country. Accordingly, I tried to restrict my practice (and teaching) to the use of spinals, ketamine and simple volatile anaesthesia.

Teaching and training

Capacity building proved much the most difficult aspect of the job. Training of local theatre nurses had been ongoing for two years and had produced one competent and capable nurse anaesthetist but the other three anaesthetic nurses were less skilled. There were several reasons for this: no skilled translators were available and the language barrier was a huge obstacle to teaching beyond role modelling and training in basic skills; local wages were extremely low: coupled with the distortion of the Dili economy caused by the many dollar-rich aid workers, myself included, this meant that hospital staff needed other sources of income, and so



What's working in East Timor like then Alan?
- I don't know, I'm just back my days off!

were often absent or delayed for emergency work.

Local administration was also poor. Indonesians had generally occupied middle management positions and senior clinical roles – these had all disappeared at a stroke and it was taking time for the Timorese to learn the necessary skills. Some of us in the UK may occasionally sigh and wish for a world free of hospital managers. I have been there, and believe me it is no paradise.

But I think, in retrospect, that I experienced a country whose population were suffering a collective kind of post-traumatic stress, or learned helplessness as I have heard it called. Certainly many individuals had horrific experiences, rarely recounted, for example the theatre nurse who was made to sit on the roof of the theatre building for a day and a night with a grenade in his mouth after talking out of turn. I asked someone why this man had an “attitude problem”. The answer was humbling, to say the least...

Ashanti Anaesthesia

A Visit to the Komfo Anokye Teaching Hospital in Kumasi, Ghana’s Second City

December 2003

Ion Grove-White

Former Consultant at Stracathro and Ninewells Hospitals

For many years I had felt the wish to give some time to applying what was left of my professional skills to help an overseas community less developed than our own. As I approached retirement – a continuing process in my case – I began to explore the possibilities, which ranged

Optimism

Despite everything however, East Timor itself is a delightful place. The Timorese are lovely people and the majority retains an irrepressible optimism for the future. Their island is a place of considerable resources and immense natural beauty. The security situation is much more stable and the peacekeepers have gone home. The Timorese are inching towards obtaining a fair share of oil revenues from the Timor Gap. A fledgling tourist industry has appeared. I hope some day to return to East Timor, as one of those tourists....

Acknowledgements

Many thanks to the Scottish Society – a generous grant supported my travel as far as Darwin, without which my trip would have been impossible. I must also thank the Australian and New Zealand College of Anaesthetists, in particular Dr Brian Spain, for continuing help and support prior to and during my time in Dili.



from war zones, through ‘surgical safaris’, to helping developing health systems which are trying to catch up with our world.

I quickly discounted *Médecins sans Frontières*, my favourite charity. I have the greatest admira-

tion for their work. However, at my age and with a significant amount of arthritis on board, I was clearly unfit for their demanding work, and could be a liability. I also looked at *Mercy Ships* but was discouraged by the aggressively Christian attitude. I have no problem with the Church, but the 'in-your-face' language put me off. Talking later to others who have been down this path, I feel I was perhaps a bit quick to dismiss them.

My next approach was to *Smile*, an American based organisation which was recruiting at the Association Winter Scientific Meeting in January 2003. After a long wait, a massive application form, an even longer wait, I eventually learned that because I did not have current ATLS, etc. certificates, they could not use me.

I knew that my former surgical colleague Arthur Morris was involved in an on-going mission to Ghana. When I spoke to him, we agreed that there could be a rôle for an anaesthetist in his next visit. He explained that Scottish surgeons under the leadership of Prof. Jack Mustardé, a retired plastic surgeon from Canniesburn, had set up a Reconstructive Surgical Centre at the *Korle Bu* Hospital in Accra, which had been very successful (*Scots Magazine*, May 2003, pp 482-484). However it had drained skills from the rest of the country, and Arthur's own role in the Reconstructive Surgery Trust was to spread that expertise to the *Komfo Anokye Teaching Hospital* in Kumasi, Ghana's second city. His perception was that anaesthesia in Kumasi was largely nurse delivered, and that a visiting anaesthetist could play a useful part. I sought sponsorship from the Scottish Society and Council approved this at its next meeting.

The Kumasi team consisted of Prof. Morris (personal chair in the Dept. of Surgery, Kumasi); a specialist registrar in plastic & reconstructive surgery now working in Belfast; and two specialist nurses from Ninewells Hospital whose remit was to teach wound and burns management. Arthur was accompanied by his wife, a nurse, and they preceded the rest of us by nearly a week. A '*Burns, Trauma & Reconstructive Surgery Workshop*' was being organised by the Surgery Dept. in Kumasi, and would be attended by doctors and nurses from all over the country. He intended to

help oversee the preparations for this three-day course. The rest of us would participate in this workshop, and the remainder of our time would be devoted to teaching the local staff, and undertaking whatever surgery was dictated by immediate need.

I followed with the rest of the team the following Friday, and we were met at Accra late that evening by the Trust's local manager Mrs Evelyn Tay, the remarkable Scots-born widow of a Ghanaian Police Chief. On Saturday morning we did a ward round with a Birmingham-based volunteer facio-maxillary surgeon in the new unit at *Korle Bu*. From his description, it was clear that the anaesthetic had been delivered with amazing skill to a patient whose jaws were pathologically locked together, and who for years had been sustained by feeding through a granulomatous fistula in his cheek. From discussion it appeared that nearly all the anaesthetics in Accra were given by doctors.

Early on Sunday we were driven to Kumasi, capital of the former Ashanti Kingdom. The 450km drive took six hours on variable roads. There was ribbon development of villages much of the way, as well as plenty of evidence of traffic related trauma. In the afternoon, Arthur Morris and the local plastic surgeon showed us round some of Kumasi's sights. After visiting the old British Fort and the former Royal Palace, we saw the Burns ICU at the *Komfo Anokye* Hospital. The following day would be spent preparing for the workshop, which would last three days. The third day would be spent operating.

Monday began with a fair amount of formality as we met the Head of Surgery and his team – this included the Head of Anaesthesia, who had trained in Germany. There were seven medical anaesthetists – all those that I met had been to America, Britain, Germany or Ukraine for part of their training. There were nineteen nurse anaesthetists who gave most of the anaesthetics, as well as several trainee nurse anaesthetists. There were three theatre sites; a main five-unit theatre suite; a two-unit labour room suite; and two theatres attached to A&E. The two smaller units were staffed round the clock by live-in nurse anaesthetists.

On Tuesday I taught in the workshop, speaking about triage and resuscitation of burns and trauma patients. It was difficult to pitch this correctly, as we learned only at the last minute that nearly all the participants were nurses rather than doctors. They were all too familiar with the concept of triage, but I had a major communication block until my 'venous access' was equated with their 'IV line'. There was great enthusiasm though.

The following day I spent in theatres, but was aware of a strained atmosphere. The explanation came at 4pm when, after seeing my demonstration cases for the following day, I stumbled into a union meeting of nurse anaesthetists. The next morning they would be on strike.

The medical anaesthetists had to cover the emergency trauma and maternity. It was agreed that I could supervise the trainee nurse anaesthetists, enabling the in-theatre demonstration day of the workshop to proceed, though I was fortunate to have the guidance for part of that time of one of the doctors. The chief nurse anaesthetist was also around, as he was allowed to undertake administrative duties. The dispute was fully justified: nurses who competed for training in anaesthesia had for years found, at the end of eighteen months training, that not only were they still on the same salary scale, but that they had lost a year-and-a-half's seniority. No one appeared to be interested as the injustice was not a national one, but confined to the provincial centre.

The teaching day went well, though the usual delays were inevitably exaggerated by the abnormal circumstances. The cases were relatively unexciting, as the messages to the workshop delegates were fundamental. Most of the cases were of buruli ulcer (a mycobacterial skin granuloma) and treatment of contractures. Two theatres were in use, and there was C.C.T.V. to the coffee room, where Arthur Morris interpreted for an audience and between cases gave basic lessons in suturing, etc.

The strike continued until the last day of my stay the following week. This effectively put paid to any ambitions involving the Nurse Anaesthetists, as they were not about, while the doctors were heavily committed to maintaining the emergency service. We had a couple of service operating days with our team the following week, and dealt with some horrific injuries; burns and road trauma. I also anaesthetised an 11-month child weighing less than 5 kg suffering from malaria complicated by epiglottitis. The child was so flat that I intubated on oxygen alone. However with careful hand-ventilation using halothane and oxygen she underwent tracheostomy and woke up an hour and a half later.

Cross-matched blood was available from the blood bank, but for elective cases, only after relatives had donated the equivalent volume. One of our operations for secondary management of burns had to be curtailed after four hours as her allocation had been



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, like those here, 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. Michie, the Hon. Secretary.



A useful drip-stand!

exhausted. She was becoming cold too, even though I had insisted that the air-conditioning be switched off. Anaesthesia for this, as in most cases consisted of halothane, oxygen and air.

The resolution of the industrial dispute, rapid compared to the duration of the complaint, was in some measure helped by our presence. The Ghana College of Physicians & Surgeons was holding its inaugural meeting in Accra at the beginning of our second week, and Arthur was an honoured guest. At a governmental reception he met the Minister of Health, who asked 'Strike! What strike?' A high ranking official was dispatched to Kumasi a couple of days later. As in most African situations however, I am sure that things were not quite so clear-cut. The nurse anaesthetists are the cream of the schools' output and I am sure that in other societies most would have gained entry to medical school. They gave spinals, anaesthetised neonates and were avid readers. They worked extremely hard and conscientiously – conspicuously so compared to some of their colleagues in the wards. There is an on-going struggle between the anaesthetists and the midwives concerning spinal anaesthesia for caesarean sections. Patients previously consented by the anaesthetist arrive in theatre demanding a general anaesthetic, having been 'got-at' by midwives who do not want to have to nurse them until the spinal wears off. Nurses undertake most of the anaesthetics in Kumasi, including those given at the small private hospitals. I suspect that they remained quite busy during the strike.

What did I achieve? Did I fulfil my ambitions? I suppose that my objectives were probably too vague in the first place. It was not the primary intention, but there is no doubt that my presence on this occasion salvaged the surgical programme set for the visit. My ideas of imparting technical expertise were patently fanciful. The obvious skill and dexterity shown by the student anaesthetic nurses demonstrated that they were clearly well taught by people who were themselves highly proficient. There was a curious paradox in the relatively hard approach to the funding of treatment, which often involved great sacrifice by relatives. The conscientious attention shown by some caring staff was in stark contrast to the rules which it was their duty to enforce. A trainee nurse explained to me that when he was trained, he would be the security for his extended family. As everywhere the service is cash-strapped. The term is relative. In Kumasi there was no point in asking how often they use laryngeal mask airways – they have none.

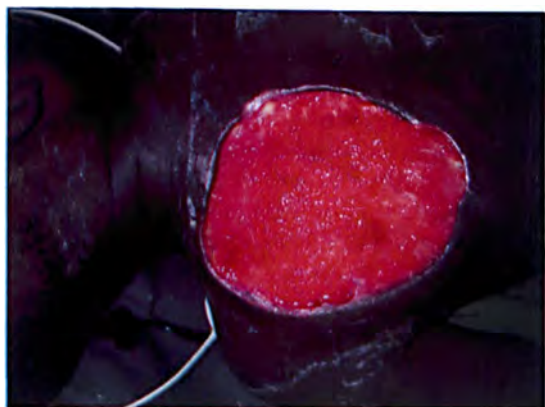
I hope I have been able to expedite a consignment of books and journals which had been promised by a retired English anaesthetist. The shipping agent had asked for written customs clearance, and enquiry revealed that no duty would be payable. However the local office refused to issue any documentation to this effect, as experience had



No cot-sides in the recovery room



Before and after a graft to repair a sulphuric acid burn in Kumasi, Ghana



Buruli ulcer

shown that such papers were frequently abused by smugglers. Mrs Tay in Accra said that she would see to any customs clearance, and could forward goods to Kumasi. The Surgical Trust makes regular container shipments from Glasgow, and I am making a collection of goodies to be included in the future.

(<http://www.plasticsurgery-africa.org/>)

I had never visited Africa before, and it was a marvellous experience. I met some wonderful people doing excellent work. Of course there were rogues and chancers as well. Ghana has a long history of peace,

which is unusual in West Africa. There have been sudden changes of government, but they have been spared the horrors of civil war. Prosperity is definitely there, but one has the feeling that everyone is so keen to achieve it that they do not slow down to maintain the successes which they have achieved.

I am deeply grateful for the encouragement and financial support I received from the Society.



Nice gear. However there was no nitrous oxide or isoflurane.

Tales from Tanzania

Kate Janossy tells of a visit to the Kilimanjaro Christian Medical Centre



After surviving my primary Fact Regurgitation Character Annihilation – I planned my escape. A year later I prepared to sacrifice a wet Glaswegian winter for an amazing adventure in Africa: as a volunteer at Kilimanjaro Christian Medical Centre, the second largest teaching and referral centre in Tanzania (conveniently located next to Africa’s highest mountain and fantastic safari country). KCMC has many experienced Assistant Medical Officers (AMOs) in Anaesthesia and Nurse Anaesthetists, but only one fully trained Physician Anaesthetist. I rapidly discovered that I was far more useful than I expected, doing clinical anaesthesia, teaching, audits, and the occasional department barbecue.

Machines that go “ping!”

For the first few weeks, I was an observer. Some equipment and techniques there are familiar, but resources are limited. Risks are assessed in a different context: a level of monitoring which terrifies pampered, gadget-obsessed trainees like me used to be quite acceptable in the UK, and the alternative may be no anaesthesia at all. The anaesthetist is still the best monitor: clinical assessment



and constant vigilance are core skills all too easily sidelined in our high-tech environment.

The whole concept of paediatric ENT without a saturation monitor scared the pants off me, although (because?) I had little prior experience in the specialty. I watched while a 5-year old with a vocal cord papilloma obstructed on gas induction but was intubated OK. She was extubated semi-awake and developed stridor so I gave oxygen with some bagging, observing her obsessively in “recovery” until she was whisked away to the ward, still drowsy. She was fine, of course.

The next case was a frail lady with post-intubation tracheal stenosis for tracheostomy. She had audible stridor



Urethroplasty

and respiratory distress. This time, I made a suggestion that despite a previous easy intubation, gas induction may be indicated. Passing a size 5 ET tube proved easy. Unfortunately, a combination of too much halothane (it's not quite like sevo), a bit of faffing with ET tubes, and pre-op dehydration, caused a BP reading of 40/20 and mass panic. I had to stop the surgeon doing CPR while I could still feel a brachial pulse. Rapid infusion of fluids soon corrected the problem, but I learned that the mzungu (foreigner) does not always know best!

A thoracotomy, but not as we know it

A few weeks into my stay, I was working like a staff anaesthetist, doing a mixture of routine lists paired with a nurse anaesthetist or AMO. We were asked to anaesthetise a 29 year-old man for repair of a post-traumatic diaphragmatic hernia. I had never anaesthetised a thoracotomy unsupervised, but my nurse anaesthetist colleague assured me he had done many. To him it was just another anaesthetic: there was no invasive monitoring anyway and he had never seen a double-lumen tube. At



Tetanus

KCMC they are used to nervous foreigners, so the surgeons put up with the delay while I went in search of a scarce saturation monitor and senior advice.

Our patient was previously fit and well and had been in hospital since a traffic accident 3 months previously. He had had two procedures for urethral stricture under spinal anaesthesia. He was very thin, slightly dyspnoeic at rest with RR 19, HR 100 and BP 120/70. Breath sounds were markedly reduced on the left with bowel sounds heard in the chest. Haemoglobin and ECG were normal. Full blood count, electrolytes and coagulation were theoretically available but the analysers frequently broke and to delay even elective cases frequently caused much friction with the surgeons. His chest X-ray showed reduced lung volume with intra-thoracic bowel loops on the left.

We used thio and sux then halothane in oxygen, pancuronium, a low dose ketamine infusion for analgesia, and a Boyle's machine and circle system, with gas flow



Hirschsprungs



ITU

of twice the minute volume as the soda lime had expired and there was no capnograph. We had ECG and saturation monitoring with automatic NIBP and an oesophageal stethoscope. The procedure went smoothly, with around 500 ml blood loss. For post-op analgesia, I did paravertebral blocks with bupivacaine to cover the wound, the ketamine infusion was continued overnight and I prescribed IM pethidine PRN. He received ventilatory support for six days after which he was extubated uneventfully.

I was learning a lot and already finding areas where I could contribute to teaching. NO₂ was relatively new, and my colleague was interested to learn about why it was best avoided in this patient. We discussed why I was happy with a systolic BP of 80 in this young man after the surgeons had handled the heart, and why excessive fluids were not a good idea in thoracotomies. He thought paravertebral blocks were great but I was reluctant to teach the technique as I was not sure the possible complications would be understood, recognised and managed appropriately. I was unsure of the relative risks vs. benefit in this environment. In ICU I learned why sedating patients is risky and impractical as there are no pumps, machinery often breaks and the nurses cannot manage ventilation problems. This patient was breathing spontaneously with pressure support and PEEP, which I gradually reduced. I later ran ventilator training sessions for anaesthetists and nurses.

Many people have been trying to improve post-op analgesia at KCMC, but opioids in particular are still surrounded by myths and bureaucracy. PRN prescription is now allowed, but despite smiling and agreeing, the nurses would not give IM pethidine more than 6 hourly. Morphine is available in pharmacy, but the head of the department would not use it in ICU for reasons he did not explain. It was not my place to argue. Despite teaching sessions and audits of perioperative analgesia, little changed during my stay. However, enough people repeating the same message will eventually lead to progress.

Eclampsia and ether

After a couple of months I was regularly helping out in obstetrics, interestingly the only theatre with just one anaesthetist and an anaesthetic assistant. I was asked to see an urgent case for addition to our list one morning. There is no CTG monitoring so most caesarean sections are done to save the mother and crash sections are rare. Our patient was a 40 year-old para-4 at 30 weeks. She'd had two seizures overnight and had a left hemiparesis. She was responsive to voice (GCS E3M4V2) and was maintaining her airway with no evidence of aspiration. BP was 180/110 with no pulmonary oedema clinically. Haemoglobin was normal, and no other investigations

were available. She had slight facial oedema but no other signs of a difficult airway. The obstetricians were not sure whether the baby was viable.

Despite some urgency, I felt I needed help. General anaesthesia in obstetrics is draw-over ether, which I had never used on a real patient, and this woman was not well. I did get advice but no help was available. The magnesium had run out. I managed to get pethidine from the ward only with a nurse coming to theatre to witness me drawing it up, then returning the used ampoule to pharmacy. The paediatrician was nowhere to be seen, but I was assured he was coming. I was told naloxone was available and gave pethidine at induction. However, I should have known better: it is impolite to say no, particularly to guests!

To my relief, induction was uncomplicated using 50mg pethidine, lignocaine, thio, sux and a size 7 ETT with introducer. Maintenance was with ether in oxygen-enriched air, the remaining 50mg of pethidine given at delivery. We had only a stethoscope, manual sphygmomanometer (with dedicated student) and a finger on the pulse for monitoring. BP improved after delivery and she remained stable with a blood loss around 1000ml. The 700g baby boy delivered initially had good spontaneous respiratory effort but unfortunately he could not survive without neonatal ICU facilities, and died three hours later.

The mother eventually woke up, with good airway reflexes and was extubated after 30 minutes. Fortunately I was able to observe her in the adjacent corridor, while continuing the list. Her conscious level continued to improve gradually, although she had a residual weakness

Thanks

I had a fantastic time at KCMC, and I am very grateful to the SSA for their support. It was great fun swapping ideas with friendly people with such a different culture and training. An open-minded and non-judgemental approach to teaching a very mixed group of enthusiastic students is hugely rewarding, and of course I learned a lot myself. Another huge eye-opener was an East African Intensive Care Seminar held at KCMC, with the emphasis on practical ways to set up basic critical care. I wonder how many oxygen concentrators you could get for the price of a course of activated protein C!

Annual Scientific Meeting

2nd December, Dundee



Fergus Millar organised an outstanding programme this year. Due to a coincidence of timing and location the Scientific Meeting was arranged as the first day of a combined two-day meeting, the second being the Scottish Board of the Royal College's study day. The prospect clearly whetted many appetites, as the turnout was impressive. It was held at Dundee's Westpark Conference Centre - an excellent venue (the queues at the Gent's were again a testament to the popularity of the meeting). Even the weather was good. The President, timing his arrival to perfection, welcomed the delegates warmly and got the day underway. The morning session, chaired by Neil Mackenzie, underlined the "strength in depth" of Dundee's anaesthetic community.

Cameron Weir gave a talk on the molecular mechanisms of anaesthesia based on some of the work for his PhD thesis. This - correct me if I'm wrong, Cameron - seemed to centre on the GABA-A receptor complex and how various amino acid substitutions could be used to demonstrate the likely site of action of different general anaesthetics both IV and volatile. Different sub-units house the receptors for different anaesthetic agents. Further it appears that the clinical effects of sedation and anaesthesia may be due to different receptors hinting at the intriguing possibility of hangover-free anaesthesia if a sufficiently specific agent can be developed.

Next was Graeme McLeod who reported on his extensive work in collecting detailed postoperative outcome variables over many years. The resulting mass of data allowed him to use survival graph statistical analysis to show the effects of different variations in the practice of postoperative epidural analgesic infusions. The factors favouring success include the experience of the anaesthetist, older patients and diamorphine rather than fentanyl. Also some types of surgery do better than others. The concept of pre-emptive analgesia was given a makeover. Now we must consider preventive analgesia - maintaining the high quality block till the painful stress of the surgery subsides. By doing this we can show improved analgesia beyond when the epidural is discontinued. The downside to better epidurals was a greater incidence of troublesome side effects such as hypotension.

Janice Rattray has a background in ITU nursing. She told us of her PhD work exploring the emotional effects in patients following unplanned ITU admissions. She

used a structured interview technique and a number of psychological self-reporting scales to measure anxiety and depression or avoidance behaviour indicative of post-traumatic stress disorder. She looked for predictors of more severe problems: older patients suffered fewer problems and interestingly a longer post-ITU hospital stay also led to a better psychological recovery.

John Luck reported on his work with Matthew Checketts looking at a panoply of anaesthetic and analgesic techniques in lower limb arthroplasty discussing the pros and cons of each. He concluded that the best results for knee replacements were with femoral and sciatic catheter blocks while hips were better with intrathecal morphine.

After lunch Eddie Wilson introduced Susan Nimmo from Edinburgh. She has been working with Ken Fearon, the Professor of Surgery, to institute a multimodal approach to reducing operative stress and postoperative functional impairment to improve colorectal surgery outcomes. This involved changes to traditional practices of analgesia, feeding and mobilisation as well as the actual surgical technique itself - plain sailing then! She emphasised that the aim was enhanced recovery rather than faster discharge though this seems a likely side-benefit. Her group was working with others in Scandinavia and the Netherlands on a prospective study using a common protocol. The results so far are encouraging.

Shaun McLeod continued the nutritional theme with a presentation on the changes to best practice advice in the field of perioperative nutrition - fasting is bad, carbohydrate loading is good!

David Scott's Gillies Lecture rounded off the day in style.

Most delegates were staying for the second day and many of them attended a fine dinner at Howie's Restaurant in Dundee - Fergus again selecting an admirable blend of both red and white wines to match the excellent fare.

The next day saw another set of excellent presentations, this time under the auspices of the Royal College. Dr Peter Simpson, College President spoke on the future of

anaesthetic services. Dr David Greaves followed him on the specific topic of non-physician anaesthetists then Mr John Griffiths, a medical lawyer, gave us more to talk about over coffee on the issue of consent. Then came some science. This delivered by Peter Andrews from Edinburgh, Dr Peter Gosling (a biochemist) and Profes-

sor Bennett from London on various aspects around the topic of fluids and resuscitation. After lunch, Tony Wildsmith spoke on anaphylaxis and some of the moves to improve the follow up of patients who have a reaction. Jonathan Bannister spoke on pain and addiction and Bill Macrae on chronic pain after surgery.



Graeme McLeod & Cameron Weir



John Luck



Janice Rattray



Shaun McLeod



Susan Nimmo



The Secretary ponders the wisdom of another glass of Highland Spring



Don't sit next to the guy with the camera Tony!



Fergus & Fiona Millar

ICU – what’s new and what’s not.

Nigel R Webster

Professor of Anaesthesia and Intensive Care, Aberdeen.



Over the last twenty five years that I have been involved in intensive care there have been many changes – the structures and delivery of critical care, the drugs used, but also not least the patients themselves. Yesterday’s ventilators which delivered a fixed tidal volume regardless of what was happening to the patient and indeed required the patients to be not only heavily sedated but also paralysed, have now been replaced by sophisticated ‘black boxes’ which can deliver many different ventilation modes. Now patients are surrounded by infusion pumps, syringe drivers and haemofiltration units as well as the boxes associated with the monitoring of the various physiological systems that we now consider routine. Patients are now more complex. Stress ulceration is now a rarity. Enteral feeding is now ‘in’ and parenteral is ‘out’. Steroids were ‘in’ and are still ‘in’ albeit at different doses and we now have evidence based medicine.

This will be a personal view of some of the newer trends in intensive care, compare practice now with years gone by, and perhaps detail lessons we have learnt from our past mistakes. I will concentrate on just a few areas: ventilation, sepsis management, glucose control and albumin, and will conclude with a brief view into the future.

Ventilatory Support

Critically ill patients often need mechanical ventilatory support. Isolated respiratory system failure is the only single organ failure for which admission to ICU is considered appropriate – all other patients require at least two-organ support – in which case the lung is almost always one of the organs to fail. In fact more than 90% of all patients admitted to UK intensive care units require ventilatory support. As with most treatments there are both beneficial effects which have to be balanced against side effects of the treatment. It is often life saving – being the first two components of the ABC of resuscitation. However, it is occasionally the case that institution of ventilatory support is associated with little improvement in oxygenation; and of course it is always associated with some potentially very harmful side effects.

We now recognise that the diseased lung is associated with patchy areas of inflammation and patchy areas of atelectasis – the disease process affects the lung in a non-homogenous manner. There are areas of low lung compliance interspersed with areas of normal lung. Since ventilation in the ICU patient is most often used for patients with diseased lungs, we have to ventilate according to parameters suitable for the diseased areas

of lung whereas in the past we have ignored the normal areas of lung. In fact, due to atelectasis of dependent lung regions there may be a reduction of aerated capacity to as little as 25% of normal. Under these circumstances ventilation with a tidal volume of 10 - 12ml/kg results in over distension of the aerated normal lung and is equivalent to a tidal volume of 40 - 48ml/kg in these areas.

Over the past 30-40 years, mechanical ventilation has become an indispensable therapy for the treatment of respiratory failure. However, soon after its inception, it became apparent that mechanical ventilation *per se* could lead to a number of serious complications, including initiation or exacerbation of underlying lung injury. Research has focused primarily on the mechanical forces (i.e. pressures and volumes) producing ventilator-induced lung injury [1, 2] which result in barotrauma and volutrauma. Despite intense research and a number of innovations in ventilatory therapy aimed at minimising such injury, the morbidity and mortality of acute respiratory failure remains high [3], and ventilator-induced lung injury remains a significant problem in the care of critically ill patients [4]. In patients developing acute respiratory distress syndrome (ARDS) only a small percentage go on to die of respiratory failure [3]. Lung injury, rather, appears to predispose patients to the development of a systemic inflammatory response which culminates in multiple organ dysfunction syndrome (MODS) and death [3, 5].

One possible explanation for this observation is that mechanical ventilation serves to initiate and/or potentiate an inflammatory response in the lung that in turn propagates a vicious cycle of inflammation leading to tissue injury locally, and possibly systemically. Clinical studies of patients developing ARDS have noted an association between lung inflammatory mediators and the development of physiological abnormalities [6]. Studies in a rabbit model of ARDS have found that conventional mechanical ventilation as opposed to high frequency oscillatory ventilation led to increased neutrophil infiltration and activation, as well as increased lung lavage levels of platelet activating factor and thromboxane-B₂ [7]. Concurrent with these physiological studies, research over the past decade has shown that mechanotransduction (i.e. the conversion of a mechanical stimulus such as cell deformation into biochemical and molecular alterations) plays a crucial role in determining the structure and function of a number of tissues, including the lung [8]. Studies *in vitro* and *in vivo* have found that both the degree and the pattern of mechanical stretch are important in determining cell responses [9,10]. Given that mechanical ventilation alters both the pattern and magnitude of lung stretch, it is not unreasonable to postulate that alterations in gene expression or

cellular metabolism may arise.

Tremblay et al [11] examined the effect of ventilation strategy on lung inflammatory mediators in the presence and absence of a pre-existing inflammatory stimulus. Rats were randomized to either intravenous saline or lipopolysaccharide (LPS). After 50 min of spontaneous respiration, the lungs were excised and randomised to 2 h of ventilation with one of four strategies: (a) control (C), tidal volume (V_t) = 7 ml/kg, positive end expiratory pressure (PEEP) = 3 cm H₂O; (b) moderate volume, high PEEP (MVHP), V_t = 15 ml/kg; PEEP = 10 cm H₂O; (c) moderate volume, zero PEEP (MVZP), V_t = 15 ml/kg, PEEP = 0; or (d) high volume, zero PEEP (HVZP), V_t = 40 ml/kg, PEEP = 0. Ventilation with zero PEEP (MVZP, HVZP) resulted in significant reductions in lung compliance. In addition, lung lavage levels of TNF α , IL1 β , IL-6, IL-10, MIP-2, and IFN γ were measured by ELISA. Zero PEEP in combination with high volume ventilation (HVZP) had a synergistic effect on cytokine levels (e.g. a 50 fold increase of TNF α versus controls). Identical end-inspiratory lung distension with PEEP (MVHP) resulted in only a three-fold increase in TNF α , whereas MVZP produced a six-fold increase in lavage TNF α . These data support the concept that mechanical ventilation can have a significant influence on the inflammatory/anti-inflammatory milieu of the lung, and thus may play a role in initiating or propagating local and possibly systemic inflammatory responses.

In 2000 the ARDS network reported results of a 'new' ventilatory strategy which significantly reduced mortality from around 40% to 31% [12]. This strategy also increased the number of ventilator free days and days without organ failure. This new ventilation mode was both pressure and volume limited with a tidal volume of 5-6ml/kg and plateau pressure <35-45cm H₂O. This strategy resulted in hypercapnia and loss of lung volume in some subjects (known as permissive hypercapnia) and required the use of lung recruitment techniques to re-expand collapsed areas of lung and then unstable lung units were held open with PEEP. There has been some controversy over this study and some argue that the control group did not receive the standard ventilation technique of the day - around 10ml/kg. Indeed a patient's representative group, which the FDA stipulates should be part of any trial steering committee in the USA, was responsible for stopping all ongoing ARDS network studies for a few years whilst this charge was investigated. However, the findings of the study were so conclusive that it rapidly became the 'gold standard' ventilation technique with all new trials incorporating this new pressure and volume limited strategy. It was also widely adopted in the UK. However, UK intensivists have never used the same high volumes and pressures that were commonplace in the USA. Hence al-

though in the UK it became widely discussed and followed, and we were all pleased to be at the cutting edge of practice, this strategy could not be considered new – we had been doing it all the time anyway. What was new was the use of PEEP to stabilise diseased lung units and the use of recruitment techniques to open up previously closed units. However, perhaps of even more relevance was the fact that the study demonstrated the ability of groups of individuals to collaborate on a research project which was rapidly able to answer clinically relevant questions. This network approach has now been used by intensive care organizations in many other countries.

Sepsis management

Sepsis still remains a major issue in intensive care medicine – it results in the death of more patients than myocardial infarction in national figures. Following a randomised multi-centre study, activated protein C has been introduced into practice in the UK. The large trial was halted half way through recruitment because a planned interim analysis showed overwhelming benefit [13]. A second pivotal study which is now required for most new drugs was not carried out. Mortality decreased from 31 to 25%. It was assumed that it was effective because of an effect on the coagulation or fibrinolytic systems but this is now not quite so clear-cut. Most septic patients develop a deficiency of protein C during the acute phase of their illness. However, the mortality benefit of activated protein C was maintained regardless of whether the patients were deficient or not. Hence it is now proposed that it is in fact acting as an anti-inflammatory agent. Essentially it has become the only drug available for the *treatment* of sepsis rather than support and any trial of new agents for sepsis will have to take this into account.

It is known that inadequate empirical therapy for patients with sepsis in ICU is associated with a worse outcome. Correct choice of antibiotics first time has been shown to reduce mortality in septic shock by 43%, reduce mortality in severe sepsis by 23% and reduce mortality in sepsis by 20% [14]. Inadequate early antibiotic therapy in non-surgical sepsis increased mortality OR=8.14 (1.98-33.5); while adequate early antibiotic therapy in surgical sepsis decreased mortality OR=0.37 (0.18-0.77). Another study showed reduced hospital mortality from 52% to 12% when correct versus inadequate antibiotic therapy was used [15]. These are much bigger changes than that seen with activated protein C – but we hear much less about these findings.

The two lessons we have learnt from this are not new: correct early choice of antibiotics will save more lives than any of the recent effective treatment studies in the critically ill and introducing new and expensive treat-

ments into routine clinical practice is difficult.

Glucose control

There has recently been a study reported – again in New England Journal of Medicine – which has had a major impact on practice within UK intensive care units. This was an RCT of intensive insulin therapy in 1548 ICU patients which aimed to maintain glucose at a target of 80-110mg/dl (4.4 - 6.1 mmol/l). Mortality decreased from 8.0% to 4.6% [16].

Again the results were rapidly taken up and used extensively – evidence based medicine in practice. However, there were problems with the study as it was not blinded and the fact that 10-20% glucose was routinely given to all patients was not made clear. However, from a practice point of view the main problem was the patient population studied – they were mainly cardiac patients who had a low mortality. Therefore the wide introduction of this practice without either a further study or a study in a population group reflecting that of the target population – the average UK ICU – was not appropriate. Further studies have now been done and the outcome benefit appears still to be present. However, the mechanism of action, is it low glucose or extra insulin, is only just starting to be untangled. In fact close glucose control is not a new idea as it has been known for a long time that better glycaemic control in diabetic and post-MI patients without diabetes is associated with better outcome.

Albumin

A few years ago a widely publicised Cochrane report revealed that the use of albumin in critically ill patients was associated with a higher mortality rate than when only crystalloid was used. There was considerable acrimonious debate on the matter. While most accepted that albumin is expensive and its use can result in hypervolaemia most did not believe that it was a source of excess mortality. However, interestingly the use of albumin in the UK decreased significantly, suggesting that intensivists may have been saying one thing but doing another.

Again a study has been completed as a result of a collaboration of many intensive care units. A randomised, double blind, prospective study in 7,000 consecutive ICU patients involving most large ICUs in Australia has been reported at a recent meeting and is currently in press – again in New England Journal of Medicine. This study showed no significant mortality difference between the two groups and there was certainly no excess mortality in the albumin group. An interesting finding of the study was that far less saline was required than would have been anticipated. The relative volume ratios would be expected to be around 3:1 saline:albumin, however a figure more like 1.2:1 was found.

The future -

Big brother is arriving at an ICU near you.

A team in the USA has now gone a stage further than the provision of intensive care without walls as we are asked to provide by the UK government. This team has designed a remote service much like telemedicine using advanced communications systems and a team of US intensivists can now look after several ICUs at once. Indeed the system is already in use in some cities where all ICUs within the city are looked after by the VISICU team.

The advertising literature certainly is a powerful sell, however it does appear to have beneficial effects. For instance, a 25% reduction in severity-adjusted hospital mortality rate for the ICU population along with a 17% decrease in both ICU and floor LOS has recently been reported [17]. Also because of shortened ICU length of stay there is a 20% increase in ICU case throughput and an associated 26% reduction in hospital costs for ICU patients. The authors conclude that if introduced across the United States an extra 150,000 lives would be saved and there would be a net cost saving of \$8 billion.

The use of such technology is clearly new, however, the fact that a trained doctor looking after the ICU makes such a difference is not new. I conclude by asking the following few questions:

What is the future role of anaesthetists within UK hospitals? This is particularly relevant with the ongoing discussion on the hospital at night.

Should anaesthetists and those that work in intensive care be worried about what the future may bring? The advent of VISICU could mean that fewer of us would be required.

Has the pendulum swung too far regarding evidence based medicine? The avid introduction of what some may consider a relatively untried practice or treatment without considerable prior thought may not be appropriate.

And watch out for the New England Journal of Medicine for the latest and most contentious issues in intensive care and anaesthesia!

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The American Connection

by Professor Alistair Spence

This story has been partly told before. The Editor flattered me by suggesting that I might write down what I knew, but when you start you soon discover that you don't know as much as you thought....

The key character is Dr Francis Hoeffner McMechan (1879-1939) who was born and practised in Cincinnati, Ohio. In 1911 he became the victim of crippling arthritis which forced him to cease practice. Supported by his formidable wife Laurette, a descendant of Baron Larrey (Napoleon's Surgeon General, pioneer of the field ambulance & snow-induced regional hypothermia for amputation of a limb), McMechan set about regular correspondence with the leading anaesthetists in the western world. The objective was to encourage the formation of national and eventually international organisations of anaesthetists. He had considerable talent as a writer and had persuaded the American Journal of Surgery to launch, in 1914, a Quarterly Supplement on anaesthesia and analgesia. The Scottish Society was established in the same year - the world's first national society of anaesthetists. McMechan soon embraced them with the Quarterly Supplement becoming the official organ of both the Scottish Society and the American Association of Anaesthetists.

The Quarterly Supplement soon listed several distinguished British names as Associate Editors. Dudley Buxton and H.E.G. Boyle are probably the best remembered, but Torrance Thomson from Edinburgh is denoted 'Associate Editor for Scotland'. Perusal of the pages for 1914-19 suggests little copy from Scotland, although the period spanned the Great War. There was, however, a half column obituary of D.C. McAllum, the

first president of SSA. The obituary is lukewarm, in my opinion and perhaps not just mine. In the SSA proceedings of 29 November, 1919 Thomson reports that the American "arrangements" were unsatisfactory and that his report to the Supplement had been altered by



McMechan without reference to him. The Secretary was instructed by the meeting to terminate the "special connection". The SSA continued to flourish; so also did McMechan. His campaign for international entente may have received short shrift from the Scots but he was including more American regional societies within his fold and had extended to involve the Canadians. He published the first Yearbook of Anesthesia and Analgesia and was the major influence in setting up the National Anesthesia Research Society which soon became the International Research Society. He was Permanent Secretary-General of both. The Research Society published its own journal, Current Researches in Anesthesia and Analgesia in 1922 with McMechan as editor.

The rift between the SSA and McMechan appears to have healed by 1926. The last issue of the Quarterly Supplement, in 1925, drew attention to the 1926 meeting of the BMA in Nottingham. McMechan had secured an invitation from the secretary of the BMA to a party of North American anaesthesiologists to visit the meeting for joint symposia with the BMA Section on Anaesthetics. The McMechans led a party to Nottingham via France, Germany and Scotland. The BJA (founded 1923) had become the vehicle for SSA reports. The July 1926 issue tells the story fully and quaintly:

The Americans in Scotland

The Scottish Society of Anaesthetists, on hearing early in the year that there was a probability of a visit from a party of anaesthetists from the USA and Canada, decided to postpone their Annual Meeting until July in order to leave open the opportunity of having those prospective visitors at the meeting. This turned out to be a wise decision, and led to a most interesting and enjoyable meeting on 6 July, the day of the visitors arrival in Glasgow.... The morning was given up to visits to the Royal Infirmary and the Royal Hospital for Sick Children where demonstrations had been arranged by Dr Fairlie and Dr Ross McKenzie, the latter prefacing the demonstration of gas oxygen anaesthesia combined with CO2 administration with a short paper illustrated by lantern slides.

In the afternoon the venue of the meeting was the Royal Faculty of Physicians and Surgeons' premises where a room had kindly been provided. The President of the Scottish Society occupied the chair and delivered an address dealing with many of the problems with which the anaesthetist is faced, special emphasis being given to the teaching of anaesthetics.

The address was singularly instructive and inspiring and left its hearers with a feeling of deep regret that anaesthesia was about to lose the services of Dr [J Stuart] Ross. The paper was followed by a discussion in



H. Torrance Thomson

which some of the overseas visitors took part.

A paper was then read by Dr Wesley Bourne of Montreal on "Some Impurities of Ether". This was very much appreciated as the participants in the ensuing discussion indicated.

The customary dinner following the Annual Meeting was held in the Central Hotel when the Scottish Society had the privilege of entertaining the party of visitors. A most enjoyable evening was spent. A novel feature of

this dinner was the presence of ladies. By a happy chance the first appearance of lady members of the Scottish Society coincided with the presence of several lady members of the overseas party.....

The BJA Board also met at Nottingham. McMechan was "unanimously elected Honorary Associate Editor in token of the highly valuable work he has done and continues to do for anaesthesia generally." It is interesting to note that of eleven Board members, three were Scots: Torrance Thomson, H.P.Fairlie (Glasgow) and John Johnston (Aberdeen). All were founder members of the Scottish Society. In 1927 the IARS presented a scroll to BJA Board. Is it significant that the Scottish Society did not receive one? I have no difficulty in seeing the hand of McMechan. What might have happened to the Society had he been allowed to come closer?

I am grateful to Drs A.H.B. Masson, A.G. Macdonald, A.G. McKenzie and Professor J.A.W. Wildsmith for their help. Dr I.D. Levack discovered the last known copy of the IARS scroll (probably Dr John Johnston's copy). It is now in The Royal College of Anaesthetists.

(The scroll will be reproduced on the website. It is too large to have here in the Annals. Ed.)



Trainees' Prize 2005 **(Sponsored by Datex-Ohmeda)**



Up to five trainees will be invited to give a 10 minute presentation at the annual Spring Meeting at Peebles.

The author of the best paper will receive a prize of £250 (and will get to go to Peebles at the expense of the Society in 2006!) There will also be prizes for the runners-up.

Entries by the end of February please. Details from Secretary, Alistair Michie

Peebles 2004

Peebles Hotel Hydro was the venue for the Annual Spring Meeting. Again. Actually this year marked the 20th consecutive year the Society has gone to Peebles. We marked the anniversary by presenting a commemorative glass plate to Peebles manager, Mr Boni. In return the Hydro laid on a champagne reception for members and guests.

Some of the sharper among you may have noticed the subtle change of name from the "AGM" to the "Spring Meeting". We felt that this more accurately reflected the changed nature of the meeting with the increased academic content of the meeting, the business of the AGM still there but contained neatly within it. The fun element of the weekend remains strong however and though children are by no means compulsory, there is so much entertainment organised for them that parents could be forgiven for leaving them carelessly behind on Sunday having forgotten all about them!

The traditional Friday sporting events allowed the maximum relaxation for the fish – this year there were no anglers! The fairways and greens however did take some punishment. The solo lady golfer - Fay Wildsmith - won as easily as the fish got away but is hoping for more competition next year! The men managed a neck and neck nail-biter with Charlie Allison winning in the end by the better inward nine score from Tony Moores. We found a consolation prize for Tony anyway. Crosshouse retained its iron grip on the booby prize through Alistair Michie's many and varied strokes. In the evening, Professor Tony Wildsmith opened the trade exhibition before a fine dinner and lively ceilidh.

The Saturday meeting began with Professor Nigel Webster from Aberdeen giving an update on intensive care developments. This was followed by the five presentations for the trainees' prize. These were all very good and this competition too was very close. It was won by Dr Parag Desai from Stirling. Parag gets a cheque for £250 and gets to return to Peebles next year at the Society's expense. The AGM, which followed, allowed Tony Wildsmith a final flourish as president before passing the Chain on to John Mackenzie. This year's Vice-President is Douglas McLaren from Glasgow. The minutes and details of new representatives are on the website. After lunch John gave his presidential address - on the Dukes of Gordon – and was followed by Professor Monty Mythen, our guest lecturer who spoke about developments in the assessment of patients' cardiac fitness.

The annual dinner was preceded by the President's champagne reception which featured - even for this event - some exceptional hot air (see pics). Then to the dinner and dance, which this year featured an unscheduled appearance by the teachers of Portobello High School – sorry for the mix-up sirs and misses - youze wer rubbish dansres by-the-way! Next morning after collecting wits and or children (delete where applicable) members set off home amid the usual chorus of "See you next year".

Dates for the leave book/ hairdresser/golf pro are Friday 22nd – Sunday 24th April 2005.

Find out what all the fuss is about!



Colvin senior celebrates Colvin junior's clay pigeon prize!



Bird? Plane? Or are they flying in extra champers?





Trainees' Prize entrants.....



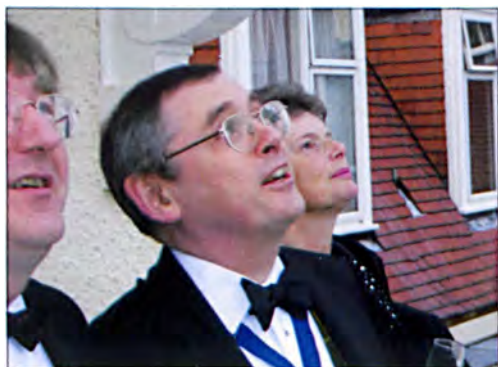
.....and Jury.



A balloonist stops in at Peebles for hot air!



Nice hat Alistair, or have you had a bright idea?



Dr. Collie, have you tried one of these?



Gillies Lecture

Safety in Anaesthesia - The Introduction of New Technology

I would like to start by thanking the Council of the Scottish Society for inviting me to give this year's Gillies Memorial Lecture. I know it is a great honour to be asked to do this.

When John Gillies died aged 80, he had a prestigious number of letters after his name. Many previous Gillies lecturers have similar honours: at least 3 knights, and 3 OBEs. I actually have fewer letters after my name than I used to have, since my FFARCS was contracted to FRCA. I would expect that Gillies was most proud of his MC and his DA, both of these were earned for bravery. The military cross for bravery in the field during the First World War and the DA for being brave enough to sit the diploma in anaesthetics at the very first examination in 1935.

Gillies was born in 1896 in Edinburgh. He enrolled in Edinburgh University Medical School in 1913 but his studies were interrupted with the outbreak of war. He went off to France, joining the Highland Light Infantry. He was philosophical about his 4-year break from medical studies. He gained, "one worthwhile consolatory asset, a mature knowledge of mankind, which would have taken 20 years to learn in civilian life." He returned to Edinburgh and graduated in 1923. He spent 9 years as a GP in Yorkshire before going, at his own expense, to London to learn the trade of being an anaesthetist. He worked with people like Sir Ivan Magill and after less than a year was able to get a job as the only anaesthetist in the Sick Children's Hospital in Edinburgh. The stipend was a princely £50 per year. The next year he shared with two others the £200 stipend



David Scott
Royal Infirmary of Edinburgh

offered to provide emergency anaesthesia in the Royal Infirmary of Edinburgh. By 1941 there were four in the department and I had the pleasure of working with Leslie Morrison and Alistair McKinlay when I was a young registrar. Also in 1941 Gillies brought about what I think was his greatest innovation. He persuaded the Chairman of the BOC to install piped nitrous oxide and oxygen in the Royal Infirmary and persuaded him to install it free of charge. I presume that Col. S.G.L. Hardie of Balathie in Perthshire (who was then BOC's Chairman) had fought with Gillies during the War.

In 1946 John Gillies got a job as the Director of Anaesthetics in the Royal Infirmary of Edinburgh and Lecturer in Anaesthesia in the University. He was soon promoted - as the James Young Simpson Reader in Anaesthesia. By 1947 he was the President of the Association of Anaesthetists, effectively our Trade Union. There was a proposal when the NHS was set up that anaesthetists would not be full consultants but only Senior Hospital Medical Officers. Thanks to the efforts of John Gillies and his colleagues from the Association, Aneurin Bevan accepted his pleas and anaesthesia was granted equal consultant status.

In 1948 Gillies and Griffiths published a paper about the anaesthetic management for thoraco-lumbar sympathectomy and splanchnicectomy. In 1948 there was no medical treatment for essential hypertension. It was known that it produced strokes and sudden cardiac death and the only known treatment was surgery. This involved open thoracic operations and a great risk of haemorrhage because the patients were all hyperten-

sive. Gillies and Griffiths analysed the problem and introduced controlled ventilation with curarisation (spontaneous ventilation with open thoracotomy was the practice at the time) and reduced haemorrhage by producing autonomic blockade at first with a high spinal anaesthetic and later with ganglion blockers. They learnt fairly early on that hypovolaemia was a poor method of obtaining hypotension. A chart from their paper shows a generous induction dose of 1g of thiopentone. A high spinal was inserted and cyclopropane and curare used to provide controlled ventilation. The blood pressure disappeared and was unrecordable for 40 minutes although the colour was good and the pulse was strong. At the end of the operation the legs were lifted up in the air, the blood pressure became recordable again and the patient was returned to the ward.

In 1944 John Gillies produced his textbook of anaesthetics - a revision of the first textbook of anaesthetics in the world. The word monitoring does not appear in the index. There is one anaesthetic chart within the book which shows the tracing of blood pressure during open ether anaesthesia for repair of an inguinal hernia. It is a bit of a switchback procedure. There are no pre-anaesthetic recordings and there is gross hypertension soon after the start of the operation. This soon goes away with profound hypotension developing by 50 minutes. Ephedrine 15 mg was injected and they perhaps sensibly didn't record the blood pressure again until the patient returned to the ward!

I started anaesthetics in 1974 in what was built as St Cuthbert's poorhouse. By then it was part of the Western General Hospital in Edinburgh. I was the last apprentice to Claude Barry, a French anaesthetist who had won the gold medal in the Sorbonne in 1936. He had developed three principles of anaesthesia which I still hold in great regard:

- Number 1 - keep the airway clear
- Number 2 - give plenty of oxygen
- Number 3 - never trust a surgeon

My 1974 copy of Lee's "Synopsis of Anaesthesia" was a relatively small book which could fit into a white coat pocket. It contained recipes for every type of surgical operation that I have ever heard of, and some that I had not. If I was asked to give an anaesthetic for something I didn't know about, it was very easy to slip off to the toilet, read the relevant pages, and come back appearing quite knowledgeable. At the front of the book were several important, pithy quotations, *Primum Non Nocere* - "Don't knock off your patients". Ralph Watters was quoted as saying "Relief from pain is always purchased at a price". Finally Shakespeare had been there before everybody else, he said in Hamlet, "For some must

watch, while some must sleep". My favourite quotation however is a misquotation and it is "Eternal vigilance is the price of safety" and that's what monitoring in anaesthesia is all about. You pick up the something that is going wrong before permanent damage has occurred.

I am going to divide the rest of my talk into 3 parts, one about pulse oximetry, one about respiratory gas analysis and the third one that I will call Vlad the Impaler. Monitoring was pretty simple in 1974. You kept your finger on the pulse, you watched a black bag go up and down, and if you had to ventilate the patient you squeezed the black bag. Anaesthetics were vaporised from glass Boyle's bottles and you only put on a blood pressure cuff for very difficult cases. Oxygen pipelines were not universal. The senior anaesthetists felt that oxygen cylinder failure alarms made the anaesthetist too lazy to check that there was oxygen in the cylinder and so they were banned. Absence of a cylinder failure alarm led to one death that I knew about at the time. Oxygen analysers were not commercially available. Temperature compensated vaporisers were on the new machines but there were very few of them around and most used Boyle's bottles. Ventilators had been invented but the senior anaesthetists preferred to squeeze the black bag if the patient needed ventilation and encouraged us to do the same. Some of my colleagues still make their trainees hold the mask on for the duration of the operation rather than allowing them to use a laryngeal mask. I expect that they will similarly be considered just as great dinosaurs as I consider my senior colleagues who wouldn't let me use oxygen cylinder failure alarms or ventilators.

In 1978 I came across a cartoon showing an anaesthetist surrounded by a prestigious amount of equipment, no patient on the operating table and the caption "we wheeled the patient out 20 minutes ago but we haven't had the heart to tell him". It reminded me of Gordon Drummond who always had every gismo that was available on his machine and also of my friend and colleague, the late Andrew Norbury. He believed that there was a critical mass of anaesthetic equipment beyond which you could not get it all to work at once. I have dedicated my career to increasing the mass of equipment that I can gather around me and keep working.

Harold Griffiths retired in 1980 and I felt very pleased to be appointed as his replacement. I started work, giving anaesthetics for abdominal aneurysm surgery, using a Boyle's bottle to vaporise ethrane. Invasive monitoring - I had to dig out of the museum a machine that had originally been used in the 1960's by Bruce Scott to investigate supine hypotension. It had a 4" screen. The waveform was a single fading dot. You could see about

4 beats on the screen before it faded out and started again. Only one waveform could be displayed at a time, either the ECG or the invasive pressure, and the analogue display could measure heart rate or mean arterial pressure but not both at once.

Saidmann and Smith's 1984, "Monitoring in Anaesthesia", recommended the use of an oxygen analyser for all patients and the assessment of gas exchange by looking at the colour of the shed blood and for cyanosis. For difficult patients it was recommended that a capnograph be used. Well I didn't have an oxygen analyser or a capnograph. My only respiratory monitor was a black bag but there was usually plenty of shed blood to observe the colour of. Equipment was often acquired through research money. Gordon Drummond was an avid researcher and had more and better kit than me!

In 1966, when Star Trek first hit our TV screens, Scotty would beam Spock back from some Klingon infested planet and Bones would attach a small sensor to his wrist. While all was well it would make a high pitched beep but as Spock's life force ebbed away the beep not only slowed but changed tone. In 1986 I got my pulse oximeter. It didn't take me long to make a patient hypoxic and I was horrified to hear a reprise of the 1966 sound track when the pitch of the note decreased as the patient deteriorated. The basic theory of oximetry had been around for some time. In the 1700s Lambert and Beer described their law of absorption. Stokes and Hoppe-Seyler described haemoglobin in 1864. In 1932 Nikolai invented a device, which the American physiologist Glen Millikan termed an oximeter. He used it in 1942 to investigate why American pilots were becoming unconscious at high altitudes. An important advance in 1960 was the development of fibreoptics. In the 1970's Hewlett Packard manufactured an ear oximeter - it looked a bit like an airman's flying helmet. However after 4 hours it would burn a hole in the ear so the sites had to be changed regularly. In 1974, Takuo Aoyagi invented pulse oximetry. The Hewlett Packard had used a broad-spectrum light source with seven different filters to compensate for the skin, fat, venous and capillary blood in the ear to get at the saturation of the arterial blood. Aoyagi made two major breakthroughs. First of all he analysed the pulsatile element only and that compensated for the absorbance of all the other relatively fixed structures. He used the new light-emitting diodes, which gave him single spectrum wavelength at each of the frequencies of the two diodes and he analysed the signal at 400 Hz. Using an equation, $S_pO_2 = AR^2 + BR + C$ where A, B and C are constants and R is the ratio of absorbance of the two signals, he was able to determine the oxygen saturation. He took his device to the Japanese monitor manufacturer Nihon Koden who politely informed him that it wasn't commercially vi-

able. The cost and size of the computer required for his rapid calculations meant that they didn't think they would ever be able to market it. His patents lapsed. The Nelcor Corporation who used a compact and relatively cheap microprocessor, which was able to do the rapid calculations in a device small enough to be close to the patient, took up the technology. It was first described clinically in 1982 and so rapid was its uptake that by 1988 the Association of Anaesthetists had made it a minimum standard for anaesthetic monitoring.

Pulse oximetry isn't perfect; the absorbance of the two species of haemoglobin is equal around about the saturation of 82 - 85%. Pulse oximeters are completely fooled by the presence of carboxi-haemoglobin in carbon monoxide poisoning and will indicate a saturation of 100% even when the patient's oxygen carrying capacity is so reduced that they are near death.

The pace of medical technology is rapid. The four large boxes that were the standard monitoring in 1990 in our cardiac surgery unit were duplicated in 1993 by a Propaq monitor. What is most surprising is the total cost: the Propaq was less than the combined costs of the other four monitors when they were new.

John Joseph Thomson invented mass spectrometry in 1899 for which he got the Nobel Prize in physics. Even 80 years later it was still expected that mass spectrometers would eventually be able to monitor anaesthetic gases. My colleague Peter Alston who got into the Guinness Book of Records for skiing down 12,000 ft from the "Golden Throne" in the Karakorums has worked with mass spectrometers in Glasgow and Seattle. He was unimpressed saying, "It takes 3 minutes to tell you that something has gone seriously wrong and if you try and treat the patients with an inhaler, the freons screw the machine for weeks".

Mass spectrometry is now as dead as a dodo in anaesthesia and has been replaced by infrared spectroscopy. Academics give the credit for the invention to a German called Luft who described the device in a paper in 1943. However in 1942 the Beckman Instrument Corporation was shipping its infrared analyser to the American army in secret. Development of infrared spectroscopy was slow. By 1963 it was fast enough to measure end-tidal carbon dioxide concentration for a physiologist but Saidmann and Eger in their famous MAC experiments used an end-tidal sampler and an infrared spectroscope to determine the MAC of a variety of anaesthetics. In 1972 Cormack and Paul reported on their attempts to improve the performance for the infrared CO₂ meter. They decided that you would have to change the laws of physics and improve the electronics before the machine would work properly. Russell in 1978 severely criti-

cised the Beckman LB2 CO₂ analyser because of its long warm up time, its non-linear amplifiers, its unstable flow controls and a lack of nitrous oxide compensation. In 1977 I was working as a Bruce Scott's research fellow. He gave me a Beckman analyser and said "its theoretically possible to measure cardiac output with this, see if you can do it." I worked for 6 months on the project but couldn't do it. The problem was the device was so inaccurate that I couldn't accurately measure the a-v difference in CO₂ content, which was the key to the whole system. Perhaps I should have persevered because there is now a device on the market, which measures cardiac output in exactly the manner I was trying to do.

There were two capnographs on the market in 1980. You had to get up very early in the morning to switch them on because they took 2 hours to warm up but they were reasonably fast and accurate. They had electronic N₂O compensation and it is worth spending a few minutes discussing this. CO₂ absorbs the infrared at 4.2 nm. Unfortunately N₂O also absorbs weakly at 4.2 nm. It absorbs in many other parts of the infrared spectrum but the small peak at 4.2 is a problem if you are trying to measure CO₂. The trick is to measure N₂O on another wavelength, 3.9 is the one usually used, and that tells you how much nitrous is in the mixture so you can subtract it from the peak shown at 4.2 leaving the CO₂ absorption.

The great leap in anaesthetic respiratory monitoring technology was the marriage of the infrared spectrometer to the microprocessor and this first appeared in the Datex Cardiacap, in 1988. The microprocessor compensated for all the problems there were before. It compensated for the laws of physics. It compensated for problems with the amplifier. It took 5 minutes to warm up, was stable all day and was accurate to 2% of the reading. Also, it was "affordable." Most of all from my point of view, it was robust. You could drop the sensor on the floor and it didn't cost a fortune to replace. This technology is now fitted into small multi-module anaesthetic machines and the cost is coming down all the time.

Vlad the Impaler lived and ruled his country from his Castle at Peles, in what is now Romania. It was said that nothing stimulated his appetite better than to watch victims impaled on a stake while he ate. Sometimes we too impale our victims during attempts at central venous cannulation. Central venous cannulation is the first monitoring modality where serious problems, including death, are likely to occur. Damage to the carotid artery and pneumothorax are relatively common and a variety of other complications can also occur. Steve Digby described fatal respiratory obstruction af-

ter carotid puncture during an attempted central venous cannulation. Dominic Bell and his colleagues in Leeds wrote up 4 cases of major stroke following attempted central venous cannulation, including one death, which occurred in a 6 month period in the Yorkshire region. They didn't go around asking the anaesthetists if there had been any problems, they went and looked at the records of the neuroradiology service and the vascular radiology service. Very few anaesthetists are prepared to write up a paper to show how silly they have been. Rule 6 in Samuel Shemm's book, "The House of God", says that there is no body cavity that cannot be reached by a number 14 needle and a good strong arm. Ellis Stokes and Swartz described the good strong arm being used to puncture the vertebral artery producing an a-v fistula between the vertebral artery and the internal jugular vein. Nagai and Kemmotsu described the inadvertent insertion of a Swann-Ganz catheter into the intrathecal space. If I realised that's what I had done, I would have pulled the catheter out, pressed on the hole and bribed my ODP to silence! Nagai and Kemmotsu deserve an award for academic endeavour, because they put the patient on a trolley, trundled them off to X-ray, and took pictures to confirm what they had done.

Anatomists tell us that the right internal jugular vein should lie in the middle of the neck just antero-lateral to the carotid artery. Unfortunately not all patients have read the anatomy book. Denys & Uretski, used an ultrasound scanner to look at 200 patients presenting for cardiac surgery. 91.5% of them had normal anatomy of the right internal jugular vein but 17 patients did not. This included 5 in whom the right internal jugular vein was completely absent. I have no doubt that poking about in the neck trying to find blood when there is no vein present can only result in arterial puncture.

The anatomy of the veins is not always obvious from the surface but is easy to detect using an ultrasound scanner. Vessels show up as black holes in a snowstorm and it is easy to distinguish arteries from veins by pressing gently on the skin with the probe. Most patients do have normal anatomy but it is simple to detect those that do not and take appropriate measures. The most appropriate measure is to look on the other side of the neck. The blood has got to get out of the patient's head somehow and if there are small veins on one side, in my experience there are always large veins on the other side. The accompanying figures show normal anatomy, two small veins on either side of the internal carotid and two small veins on the medial side of each of two small arteries. There were large internal jugular veins on the left side of each of the patients with an abnormal right side.

In 1999 I wrote an editorial for the BJA entitled "In the



Normal Internal Jugular anat-



Small abnormal jugulars ei-
ther side of the left carotid



Right side (same patient) an abnor-
mally large int. jugular

Country of the Blind the One Eyed Man is King.” I explained how ultrasound scanners could be used to check the anatomy prior to puncture, to observe the process of cannulation of the vessel and to challenge traditional teaching. The easiest thing to do is to do is to check the anatomy prior to puncture, my technique is to spray the neck with chlorhexidine in alcohol which lasts long enough to act as a coupling medium before evaporating. This can be done while the operator is putting on his gloves and gown and should not add any time to the procedure. A second application of the spray provides disinfection. It takes a little longer to put a sheath over the ultrasound probe and observe what is happening during the insertion of the cannula, but if this ensures a trouble free cannulation the time taken is amply repaid. I was taught to place the patient head down, to turn the head to the left, to ensure full extension of the neck by lifting the patient up and putting a pillow under the shoulders and if necessary press on the abdomen. I never liked the manoeuvre of lifting the patient up and putting a pillow under their shoulders. The endotracheal tube often disconnected and sometimes fell out and I felt that the head was swinging on the anterior cervical ligament in a dangerous way. In a paper published in *Acta Anaesthesia Scand.* we studied the necks of 35 volunteers on whom we tried a variety of recommended manoeuvres. The best way to increase the lateral diameter of the internal jugular vein, giving a larger target area, was to tip the patient 30 degrees head down, to apply an abdominal binder or to perform a Valsalva manoeuvre. If I need a CVC, tilt the table please! While the Valsalva manoeuvre is the best way of increasing the size of the vein we abandoned it fairly quickly because of the cardiovascular effects on the patient and the several occasions when we forgot to restart the ventilator! Turning the head to the left slightly reduced the

size of the internal jugular vein but it is necessary in many people because the chin gets in the way of the flight path if you don't. Neck extension was a particularly bad manoeuvre reducing the size of the target from a mean of 11.5mm to a mean of 6.9. This removed any lingering guilt that I felt for abandoning a technique held dear by those who taught me to cannulate veins. Of great educational importance was the discovery that the pressure that most people exerted to palpate the carotid artery was transmitted to the vein and halved the area visible on ultrasound. This is now emphasised to all my trainees.

Possession of a working ultrasound scanner is of great comfort when faced with cannulating the neck of a morbidly obese patient. Without it you have no idea of the anatomy under the skin. The only certain thing is that the veins will be a long way down. Ultrasound scanners can be used for cannulation of arteries and veins at all the traditional sites of the body and several where the vessels are not palpable and therefore not accessible using landmark techniques. I am now so happy with the scanners that I am tempted to use ultrasound for routine radial artery cannulation. It is only the slight fear of infection that stops me doing it.

Persuading people to use new technology can be difficult. There are always those who will use something because it is new and it is there, which, I think, is the only reason that the Sinclair C5 sold in any number. Most people are more likely to use technology if it gives them a competitive advantage. In biblical times David used a long range ballistic missile to overcome Goliath and developments of the long-range ballistic missile over the centuries eventually enabled man to conquer space and land on the moon. As a child I thought that

the Unionists won the American Civil War because slavery was wrong and God was on their side. In fact they won because their Springfield Rifles were accurate at 400 yards while the Confederate muskets were only accurate at 100 yards.

In 1956 two unknown Scots racing drivers won the Le Mon 24-hour endurance race in a D type jaguar prepared in a back street garage in Edinburgh. They went back the next year, this time with 2 D type jaguars and another 2 unknown Scots racing drivers, and came first and second. They were able to do this because they had a secret weapon – disc brakes. Disc brakes were far superior to the drum brakes fitted to all the other cars and enabled Ecurie Ecosse's success. Jaguar had the technology but had been unwilling to apply it to their previously successful works team. In 1958 the works team, fitted with disc brakes, swept the board and Ecurie Ecosse returned to obscurity. Pulse oximetry was winning technology when it was introduced. It is the only device I have ever introduced to the ICU where the nurses would go and take it out of the cupboard and put it on to the patients. Usually they would take devices I had left on patients and hide them away in the darkest corner so that I couldn't find them. The incorporation of pulse oximetry as a minimum standard by the Association of Anaesthetists in 1988 was not to encourage anaesthetists to use the technique, but to enable us to persuade our managers to buy us the equipment.

Persuading people to take even quite simple safety steps to prevent rare events, which they consider are never likely to happen to them, can be quite difficult. Good examples of the introduction of seat belts in cars and the ban on using mobile phones while driving. The 1994 AAGBI monitoring standards exhorted people to use capnography especially when intubating patients. It is unfortunate that at least 2 people died in Scotland long after these guidelines were introduced because capnography was not being used when the oesophagus were intubated. It is not difficult to assess the neck with an ultrasound scanner prior to intravenous cannulation. NICE produced a guideline in 2002 recommending that ultrasound was used for all central venous cannulations. Since the guideline was endorsed for use in Scotland at least 2 patients have died following damage to the carotid artery during attempts at central venous cannulation where ultrasound was not used.

The opposition to the introduction of ultrasound has personally disappointed me. An editorial in the British Medical Journal said it should only be used for difficult cases, but you don't know that a case is going to be difficult before it is too late and you have got yourself in trouble. I think it far better to use ultrasound from the outset. One of the guidelines said "NICE have taken a

sledgehammer to crack a nut". At a debate organised by the Association of Anaesthetists I was particularly disappointed when I proposed that ultrasound guidance should be used for all attempted central venous cannulation and the motion was overwhelmingly rejected by 10 to 1. At the anaesthetic conferences in the Belle Plagne Ski Resort I have been treated like a wimp for advocating the technique but it is slowly being accepted. One particularly macho skier, the kind who climbs up the hills, rather than use the chairlift, and then skis down the other side of the mountain where only the brave or foolhardy go, seems to have undergone a Damascene conversion. He didn't explain what went wrong but he told me recently that he uses ultrasound for all his cannulations and wouldn't contemplate doing one without it!

Let's not emulate President Bush. Let's take the lens cap off and see where we're going!

The references for this lecture are available by e-mail from David.Scott@luht.scot.nhs.uk



Harry Potter and the Prisoners of the Ashcabin

(I've actually got seven of these so I'll need my editorship extended!)

Hermione gasped, "I never imagined it could be like this...Not that it wasn't great before but now it's..."

"I know. It's.....Wow!" said Harry.

Hermione gazed across from their seat by the window to the bar where Ron was getting in the butterbeers. "Look, you can actually see all the way to Ron!"

"Yeah. Wow!" said Harry again as if dazed.

"All very well for you lot!" grunted Hagrid. I'm going OUT SIDE" – he pronounced this very slowly – "for a puff o' me pipe. Environmental tobacco smoke my foot! You lot are always doin' stuff wi' smoke n' mirrors what about all that then? Why in't that banned an' all then eh?"

"Off you go then," smiled Hermione taking an exaggerated breath of the now fresh pub air.

"Yeah, they were dead wrong about the effect on the pub trade anyway. The Wasp and Dustbin's making a killing flogging Marlboro umbrellas and pub-logo fleeces."

"Fleeces is right – those prices is an outrage!" fumed Hagrid as he left.

"You like a fly puff don't you Ron, what do you think



of the new ban?" asked Harry.

"Who told you that?" Ron looked around anxiously. "Oh fags. Yeah actually I gave them up. Can't be bothered traipsing in and out like a bloody yo-yo. All the same I will miss Prof. Humblebore's indoor fireworks. That last show when he was "discussing" his new contract with the Magical Director was a cracker!"

"Well brilliant," agreed Harry. "What is SPA anyway?"

"Well brill... Just because you've got your FRCW doesn't mean you can stop speaking English, Harry," said Hermione reverting to teacher mode. "Supporting Pointless Activity." I think it's something in the hospital managers' new contract."

"Actually," said Ron surprised at himself, "it's in the consultants' contract. How DID you manage to get that Specialist Wizarding job 'Mione?"

"Discretionary points – don't get me started." The sudden appearance of Prof. Snape had, as usual, taken them by surprise. "Have you done my premeds yet Potter?"

"They'll all have been done at the pre-assessment clinic, so the patients are coming in tomorrow. Anyway I won't be with you as I was on call last Tuesday sir," said Harry.

"But if I'm on my own how am I going to get all my important phone calls done? What about my coffee spells," whined Snape.

"Some of the other professors take their coffee in the theatre," suggested Ron. "I'm on an AWLS course tomorrow. I could sneak out and give you a spell if you'd like sir."

"Very kind of you Weasley. Come and see me if you need a reference. What was that Potter? What's an AWLS course anyway?"

"Acute Waiting List Subversion sir – a muggle idea originally," piped up Hermione her nose wrinkling suddenly at the thought. "Say what you like about fag smoke, it did cover a multitude of smells!"





What?

Who?

Where?

When?

- News from the Regions.....

The Editor thanks all of his correspondents – the usual thinly veiled job adverts abound amid comment cynical or optimistic. Also some contributors did not wish to send an update – to avoid depressing the rest of us with their tales of woe.

Aberdeen - Brian Stickle

Those of you awaiting news of the opening of our glorious and shiny new children's hospital wait no more! It is open! After two years of canker like growth on the side of the A&E department we were finally allowed inside early this year. And very nice it is too with huge amounts of space compared to the old hospital. Lots of light too which illuminates the vast amount of artwork hanging there. There are also some fascinating sculptures filling some of the gaps between buildings including one collection of rather bizarre, large artificial trees which would not look out of place in the Lion King. The operating theatres are (to these eyes) large and well equipped. There is also a separate children's dental theatre which finally allows the anomaly of the children's dental GA list taking place in the nearby psychiatric hospital to end! The only bad news in all this is the fact that the old children's hospital's wonderful canteen has closed.

Of course this year the President of the society is our very own John Mackenzie. By the time you read this he will probably have tired of wearing the chain of office to work. "What a weight!" he exclaimed to me just the other day "I'm exhausted. How can anybody do a full days work wearing one of these things?" His request to always be doubled up with the most senior trainees on the grounds of this burden of office received a sharply unsympathetic response from the rota master.

The transition to the new contract seems to have occurred with minimum loss of life. Now the main thrust seems to be the impending QIS visit. I wonder what they will have dreamt up to excite us next year?

The general working of the trust has continued unabated and indeed the department expands rapidly (four new consultant posts in the offing), as, less fortunately, does

its workload. This year we have only two new appointments to consultant posts: Alan Thomson who was one of our trainees and actually came back from Australia and East Timor to work in sun drenched Aberdeen and Bill Brampton who has moved up from a consultant job in Cheltenham. Indeed the appointment of these two fine young men should allow, hopefully, the set-up of a separate consultant maternity night rota. This will give us seven night-time consultant rotas in the department. What a busy lot we are!

Unfortunately this year there was also the very sad news of the untimely death of Greg Imray whose obituary appears elsewhere in these Annals. Greg was an immensely well-known and popular figure. His funeral was extremely well attended and was a fitting send off for a great contributor to anaesthetics and intensive care in Aberdeen.

Ayr - Iain Taylor

After eight years of effort, we have appointed a pain nurse and are getting an acute pain service !!!

These words mark the eventual success of the determined and protracted efforts of the anaesthetists at Ayr to cause enough grief for our management to convince them to fund the appointment of a pain nurse.

We had tried everything... repeated requests; jointly signed letters, an audit showing the dangers of our current practice; pointing out the "Minimum Clinical Standards"; a nine month "strike" refusing to do waiting list initiatives etc etc. So why, I hear you ask, did we succeed?

Score one for the NHS QIS.

We were informed that we would be participating in the NHS Quality Improvement Scotland. Lo and Behold! there is a section on the "Acute Pain Service", to which

we were able to answer "Not Present, No, No, See above answer, N/A" etc

This proved to be the straw that broke the management camel's back and the revenue necessary suddenly appeared, just like magic, after years of "We understand that this is a necessary post but.....".

We have also seen the appointment of a nurse to lead the preoperative assessment service and we are now "banking" patients to replace late cancellations and keep the lists full. Unfortunately, priming the bank is filling the preop lists to capacity and I am now profoundly glad to make it to Tuesday lunchtime!

As for the rest of the department's issues:

No progress with extending the HDU.

New contract in place without any face-to-face negotiations and only minor changes in our working pattern.

Some high-profile retirements approaching horribly quickly.

No hobbits this year, sorry

Balfour Hospital, Orkney - *Colin Borland*

Yes, we are looking to recruit two Consultant Anaesthetists, but more of that later! My recent visit to Dundee on the occasion of the 2004 Scottish Winter Meeting brought to mind my visit to the city a year earlier. The occasion was as an air-ambulance escort of a head-injured patient for whom no bed was available in Aberdeen. Arriving at Dundee airstrip about 5pm we were surprised to find that there was no road ambulance to meet us. Questioning airport ground staff revealed that the ambulance had already left with another head-injured patient- the driver of the tanker which was there to refuel our aircraft! He had been knocked unconscious by one of the doors on his bowser. Unfortunately for us, this meant that there was no fuel available for 5 or 6 hours as photographs and other evidence were required by accident investigation personnel before the tanker could service our plane. Once the road ambulance had returned and collected the patient, the pilot, paramedic and I made for the nearby fast-food restaurant. We couldn't believe it when told that it would be at least an hour before we could be served. Hungry but undaunted, we took-off for Aberdeen where we successfully refuelled before departing for Orkney. After take-off from Dyce airfield the pilot drew my attention to the stunningly clear view of Hoy hills in Orkney and the colourfully approaching sunset.

Forty-five minutes later as we crossed the southern outposts of Orkney the area around Kirkwall airport disappeared in mist! We circled three times but despite being

able to see the landing lights on the airstrip, poor ground visibility meant that the plane could not be landed. So off to Aberdeen again, where we landed about 11pm. Our paramedic was in tears by this time. Missing her family I thought, but no- her problem was earache each time the plane had taken off, landed or attempted to land. More bad news was on the way, however. The pilot had run out of flying time and could not return his air ambulance to Orkney until 11 am next day, at the earliest. Reluctant to wait so long, I rose early next morning intending to catch the 7am scheduled flight home to Kirkwall. Very unusual, but there were no vacant seats as performers and audience for the annual Orkney Folk Festival had filled the plane! However, after this further setback life began to improve. We were able to purchase decongestant spray for our suffering paramedic before departing at 11am for Kirkwall. An uneventful return journey. Yes, except that I was able to take the controls of the Islander air-ambulance for much of the return flight to Orkney.

Proposed changes to the provision of air-ambulance services mean that from April 2006 Loganair and its Britten-Norman Islander air-ambulances are likely to be a thing of the past for Northern Isles patients. So what will I be able to write about in the future? Well, there'll surely be departmental news to report. Which brings me to the current situation at Balfour Hospital where Colin Rae, our GP Anaesthetist, left for Edinburgh in November and John Scott, my Consultant colleague, will finish in February. So yes, we are looking to recruit two Consultants to the department - being able to fly an air-ambulance will not be a requirement for these positions!

News from the Far North:

Caithness - *John MacLeod*

Here in Caithness life is lived at a slower pace. Nowhere is this more evident than the operating theatres. It takes a long time to acclimatise to the local customs - late starts, early finishes, long coffee breaks, and an hour for lunch. Unfortunately our idyllic way of life is under threat.

Currently we are a department of two consultant anaesthetists and one of us (Joost Leeuwenberg) retires in three months. Despite our obvious attractions and geographical splendours, recruitment has proven difficult. Hard to believe that no other hardy soul would like to join us. Could it be the 1:2 ½ rota, professional isolation, low work intensity and lack of professional challenges? I do hope not. The workload is sufficiently interesting and varied to maintain one's interest and there are excellent professional links with our larger neighbours in Inverness. The sheer unpredictability of cases coming through the doors can make for short peri-

ods of intense excitement and considerable clinical challenge. Our consultant colleagues carry out all out-of-hours operating making the rota considerably less onerous than it might at first seem.

Sadly recruitment problems are only a part of our woes. Some of you will be aware of our little local difficulty with obstetric services and Polish locum (ex) staff. That nice chap Professor Calder came up from Edinburgh with his expert team in the summer to tell us that our present obstetric arrangements were clinically unsound. (Three resident Consultant Obstetricians providing 24-hour consultant cover for a unit which has 220 deliveries per year) We all await with baited breath the outcome of a long and acrimonious public consultation exercise by Highland Health Board. The smart money is on a plan to provide some form of hybrid cover with visiting obstetricians from Inverness and our local general surgeons providing out-of-hours cover. This option is known locally as WOW. (Worst Of all Worlds)

Our local difficulties are of course a reflection of the problems shared by most remote and rural hospitals, and will be familiar to many colleagues in similar circumstances. Only last week we were visited by the Scottish Health minister Andy Kerr, who gave us a sympathetic hearing and much reassurance, when he told us that he was looking for 'strategic solutions'.

So, if there is anybody out there with an interest in missionary work and a hankering after a more peaceful life, then get on your donkey cart and head up the A9. You can't miss us, we're right at the end of the road.

Crosshouse - Chris Hawksworth

I have been asked to produce a positive and cheery report about life at the northern end of Ayrshire anaesthesia. That shouldn't take too long then. On reflection, several good things have happened this year. A new consultant colleague, Caroline Whymark, has joined us. Despite not having worked here before, Caroline quickly had us sussed and will soon be taking maternity leave. Our secretary Sylvia has become a Granny, for which role she has assiduously cultivated her grey hair. A colleague did comment that Sylvia wasn't grey when she started working for us. I'm sure this is just coincidence.

This year has been a year of change at Crosshouse. We have a new consultant contract, new anaesthetic machines, new or refurbished theatre suites and a new maternity hospital is taking shape on site. We have responded to these changes in our usual dynamic and enthusiastic manner. New SHOs are issued with theatre maps and GPS navigational aids and the anaesthetic sis-

ter is on call 24/7 to explain how to get the new anaesthetic machines to stop beeping or even work. However, we are all wondering who is going to do the work when management put us on a 40-hour week in April 2005. At least that's what the contract says we'll be doing.

Several anaesthetist hours have been lost due to head injuries in the new day surgery theatres. The architects, Snow White Design and Build, assumed 5 feet clearance from the floor for the gas/power pendants was acceptable. Following a Clinical Risk Management review it was suggested that Stan Zimmer would be the only consultant allowed in these theatres. If this were not acceptable, a positive discrimination policy for the vertically challenged would be introduced at future consultant interviews. Meanwhile we'll carry on borrowing hard hats from the maternity building site workers!

On a less cheery note, at least for us, the irreplaceable Terry Miller finally hung up his straight bladed scope and retired in May. Not surprisingly, he has yet to be replaced. We wish Terry a long and contented retirement and we'll try not to get too jealous. Our departmental opera expert, Antonio Martinazzo is off to London to take up an SpR post. Our SHOs Tom Gilkes, Brian Digby, Laura Dagg, George Eapen and Rod Hamilton have all made similar if not always quite so distant moves. Congratulations to them and good luck with their careers.

Dumfries and Galloway Royal Infirmary and Stranraer - Hugh Brewster

The power of our Editor is frightening. Last year my report included a waspish comment on the fact that we do not have an SpR and what is happening in February 2005 SpR Jolene Mitchell is coming down from Glasgow to join us for 6 months. We all hope she finds her stay both enjoyable and informative. This leads me to ask myself what waspish comment would I like to make this year so that our Editor can once again wave his magic wand. I think my number one wish at the moment is that our two Staff Grades, John Carruthers and David Ballingall, along with all the other SAS doctors in the country might be offered a new contract.

As far as our juniors are concerned there has been a complete change over. Anita Vinjarayer, Majd Al Shamma, Wael Abdel Rhman, Laura Dagg, Murali Patri and Emma Whyte have now scattered to various parts of Scotland, England and Wales. They were a great bunch and I hope they enjoyed their stay here as much as we enjoyed having them. Our new SHOs include Darshan Pathak, Vishal Gupta, Deepani Wijesinghe. All three are experienced anaesthetists who are settling very well into their first jobs in the UK. In contrast our local tal-

ent, Rosel Tallach and David Christie were beginners in anaesthesia but are both showing a natural aptitude. During the year we had our first PRHO, Stephanie Thomas and she found her time with us most helpful in choosing her career – Microbiology! Greycy Bell from Columbia has taken her place and she will be greatly missed when she leaves us in November 2004.

Compared to all this mobility the consultants in Dumfries and Stranraer are a load of stick-in-the-muds. No one has left which is good news and even better news is that Patrick Salt is going to join us from Walsall in January 2005. This should reduce the number of extra lists we are doing covering sick leave for Ron Meek and Bryce Watson. Poor Ron slipped in theatre and has sustained a spiral fracture of his femur while following a viraemia, Bryce has developed a dysfunctional autonomic system. It takes an anaesthetist to develop an illness like that! Tim Barber, formally of Inverclyde and Vale of Leven, has been a great bonus as a locum during our shortfall.

Dewi Williams and his intensive care colleagues showed the strength of DGHs by being level top contributor in all of Britain to the PACMAN trial.

Western General, Edinburgh - *Charles Wallis*

Despite the waves of change afflicting the Scottish Health Service at present we have had a reasonably settled year at the Western. Colorectal surgery and ENT are nicely bedded in and we have had some additional urology and colorectal work transferred from other hospitals in the region. The management are responding to the 'drivers for change' with an option appraisal called Better Acute Care in Lothian, which could have a major impact on this site. We await the outcome with interest and trepidation tinged with a little cynicism.

Consultant staffing has been stable but with the addition of Liz Steel who is doing a locum to cover the additional coiling activity for subarachnoid haemorrhages. This follows the centralisation of this service in Edinburgh for the East coast of Scotland. Jon Wedgwood was called up and spent six weeks in the summer heat of Basra. We were all glad to see him return safely, though his experience seems to have given him itchy feet. He is now off to Dundee for a year, to broaden his horizons. We wish him well and look forward once again to his return.

Trainees have had their rotas turned upside down to achieve compliance. Registrars now do a solo night shift while SHOs go home at night. Meanwhile the Hospital at Night team is around the corner. On the academic side Stuart McLellan has been our lecturer for the last

year with his interest in blood transfusion and Intensive Care. Dougie Duncan has taken over as lecturer following his stint of research into BIS vs. Entropy in neuro-surgical anaesthesia.

In ICU we have been busier than ever. Last year we had a record number of admissions. Fortunately we have benefited from some capital investment. Our ICU beds have increased from 8-10 and the co-located 'level two' HDU from 4-6. There seems to be no problem finding patients to fill the beds!

On the managerial side Talat Aziz has taken over from me as Lead Clinician and Rob Sutherland is now Consultant with Administrative Responsibility. Janet Jenkins continues as the Clinical Director for both this site and the Royal Infirmary. Good luck to them all!

Edinburgh Royal - *Bernhard Heidemann*

Some still call it the New Royal Infirmary of Edinburgh but it doesn't feel all that new any more. Remember "new pence"!

Before the move, David Watson wrote about the buckets we used to catch rainwater coming through the roof. We should have kept them – water coming through the ceiling is still quite a regular occurrence! Given the cost of things in PFI-world (a rawl-plug and a screw will set you back £25) - the new buckets must be worth a fortune.

But it's not all bad. We moved from a Victorian facility into one representing 20th century standard. Our new monitoring and anaesthetic machines should have convinced even the most sceptical anaesthetist that a Nuffield 400 on a BOC Boyle's machine with some Datex or HP monitoring is no longer state-of-the-art. Our Anaesthetic Technical Services department deserves a mention. I have trained in several locations in England and Scotland and have never come across a more competent and helpful bunch of people. Thankfully, they have not been privatised as was originally planned.

Two consultants retired this year: David Beamish, who must have worked at most Edinburgh hospitals lately mainly at the Western General and Roodlands Hospitals. Sandy Buchan also retired, after 30 years of service to obstetric anaesthesia. We have not lost him completely as he has come back part-time. Three new consultants have been appointed: Ros Burns to strengthen the obstetric team and Liz Wilson and David Cameron are the new kids on the block in ICU. Four years ago some may have queried Julie Watters' clarity of mind in joining the cardiothoracic anaesthetists (sorry guys). Things have clearly gone from bad to worse. She has

now become a fully-fledged obstetric anaesthetist! Colin Moore will fill the gap she has left behind in April. Rob Forbes got a consultant post in the Borders, Andrew Woodward and John Wilson are currently working as locum consultants in the Royal as are Chris Bain from Melbourne and Craig Grice from London.

The EWTD caused much headache and heated discussion, but after much hard work a new shift system has been introduced. The number of trainees resident overnight has been reduced and the initial monitoring shows the shifts to be "compliant". However, with the forever changing arrangements for acute care in Lothian, we will no doubt have to make more adjustments before long.

The shift of orthopaedic trauma and acute general surgery services from St. John's has increased our workload especially at night. Hopefully over the next year, these changes will be finalised allowing all of us to adapt fully.

The new consultant contract has been implemented and for the most part discussions went smoothly and amicably - job plans of up to 12 PAs were signed off for most consultants. Netting off of family planning fees from back pay and future arrangements for family planning are still under discussion. The employers continue to choose to ignore the Ts&Cs, and the BMA ...; well let's just say they're no longer receiving my subscriptions. The third cycle of appraisal is in full swing and will soon be followed by the first round of revalidation. Still wet behind the ears, I asked one of my much respected elders whether it had actually achieved anything. His answer can easily be summarised in a two letter word.

At last there is some good news on the IT front. The company that promised us HIS (the Hospital Information System) and not delivered as much as an electronic diary has at long last been sacked. As to the rest, I bought myself a laptop and am eternally grateful to the University for connecting it to their network. Courtesy of the NHS IT department I even acquired a 10 year old printer gratis as it was being thrown out. Half an hour of my on-call time cleaning it and some minor adjustments and I fully expect another 10 years of service. {Is that what Do IT Yourself means then. - Ed}

Fife - Gordon Smith

Another year gone by and impending retirement moves ever closer. The last few months have been dominated by the work involved in the implementation of the new consultant contract. The fear that we would not be adequately rewarded for our workload has proved unfounded and most people have ended up on 12 PAs,

though many will probably reduce to nearer 10 after back pay is received. This has now, at the time of writing, been paid out to around 50% of our consultants evidenced by the large number of Ferraris and Porches in the car park!

The centralisation of all acute services in 2009 is still on target, but the ramifications of the EWTD have put extreme pressures on our service, especially on our ability to cover our isolated maternity unit. Efforts to move this on to the main Kirkcaldy site early have been thwarted, as a temporary move costing £9 million has not been accepted by the SEHD. Instead they wish us to continue with a manpower solution involving the use of non-training posts, which is already in place and may have to continue for the next 4 years. This is a high-risk strategy and may well lead to the necessity of regular consultant resident 1st on call - a happy thought indeed!

On a more positive note our permanent anaesthetic staff remain committed to providing a first class service for Fife. We have had no retirements or new faces in the last 12 months, but the loss of sessions resulting from the new contract means we will soon have to recruit new consultant staff or curtail our service. Jill Duguid is on maternity leave until April 2005, (a second son in September, without any recourse to help from her anaesthetic colleagues!) We have had great assistance from two locums, Pekka Neuvonen who brought us his Finnish sense of humour and Arthur Allison who divides his time between Scotland and Australia. He even tells me he prefers the Scottish climate or perhaps it's just the Munros.

We have also recently had a visit from NHS Quality Improvement Scotland which was, on the whole, very positive about the way we run the anaesthetic services in Fife. They were particularly complimentary about our sophisticated computerised rota which can do everything except give the anaesthetic though Hany Mina is working on that!

Lastly, I usually thank my colleagues for their help and support in making the job of Clinical Director so much easier. However, I've decided not to repeat myself this year, but instead thank them for not mentioning too often my mid life crisis choice of motor car!

Forth Valley - Andy Woods

It has been, and will be a time of change for Forth Valley until the new hospital at Larbert opens in 2009, with most of the hospital departments rationalising into what will be the acute site at Stirling and a 'cold' site at Falkirk. The Obstetric units merged last year in SRI, all trauma from December 2004 will be done here also, and

the ITUs will merge into a 9-bedded unit based at SRI. This will mean we will have a department of 20 consultants, 5 SAS doctors, 14 SHOs and 3 SpRs rotating from Glasgow. Most of the consultants are now doing some cross-site work, and the rotas will come together sometime in 2005.

Our latest permanent addition to the department is Chris Cairns from Edinburgh, who I'm sure will be an outstanding appointment for Forth Valley.

Glasgow Royal Infirmary - *Mike Basler*

Once again it has been a year of change at the juggernaut that is GRI. Early on after years of the solitary confinement that is the Clinical Directorship, Willie Frame has passed the poisoned chalice to Fiona Pear-sall. In a short time Fiona has put her inimitable signature on many new aspects of the department (and several hundred memos).

As with everyone else, the new implementation of the consultant contract was sure to promote the outbreak of peace and harmony amongst all in the North Glasgow Trust. Interestingly, unlike other management teams the GRI management had a sly tactic up their sleeve, which was to divert attention away from the contract by creating even more angst and ire with the implementation of the new car parking policy. Currently it seems that there are more managers/cardiologists etc. than anaesthetists with parking permits and this has caused great disquiet. Dr Reeve (he's on the resuscitation committee), has assured us GRI has changed from the ABC approach, to the M,S,C,B,IT,A.... hierarchy for resuscitation. There have also been several "Trinny and Susannah" makeovers amongst some of the senior consultants as the normal approach of collar and tie is dropped in favour of a more casual "anything goes" approach to public transport fashion. Some younger members of the department have been turning eyes and even occasional stomachs with the regular appearance of Lycra in the link corridor.

Clinical activity soldiers on. The new ITU is getting built at speed and according to Dr Kinsella's current predictions it will regularly have a 437% occupancy. The Princess Royal Maternity Hospital continues to be very busy and a source of great experience and sleepless nights for various members of the consultant staff. The increasing rate of C sections means that as expected, the east end of Glasgow's (too push to push) brigade are occasionally having their elective sections cancelled. Thankfully nobody has exceeded the waiting time limit (1 year) - yet. The Cardiac Unit is still working away on the plans for a new cardiac heaven a.k.a. "Golden Nugget" at Clydebank. Will it merge with a new Las

Vegas style casino - who knows.... ☐ Due to current resources the Chronic Pain Team is currently asking Victor Meldrew to become their life coach and motivational speaker. Any patients being referred to the Clinic are being asked to travel to the "triangle of danger" in Iraq since they are likely to have better resources.

The Department welcomed new arrival Chris Parker from London - his post is between Stobhill and the Royal. There have also been a few other "additions". Health and Safety are currently investigating the water supply at the Royal for signs of excess oestrogen as various trainees have had children this year. At least water shortages are associated with happy events.

We continue to work, teach and play under difficult circumstances and I am still surprised by the resilience of both the medical and nursing staff as they continue to provide the care they do. Henry David Thoreau, an American philosopher and ecologist, was once quoted as saying "Most men lead lives of quiet desperation." Obviously, he must have worked here in a previous life.

The Institute for Neurological Sciences, Glasgow - *Linda Stewart*

The Institute is now establishing itself as a regional Head and Neck Centre with the addition of OMFS and ENT to the specialities on site. This means the anaesthetic department is now well positioned to provide difficult airway training for anaesthetic trainees. Two local SpRs have undertaken 6-month attachments to this end, and we would welcome further interest. We've run two difficult airway study days to date, and taken an active role in the RCA workshops. Regarding neurosciences, there will be a development in the field of interventional radiology, and consultant expansion to facilitate this. We hope shortly to institute collaborative working with Yorkhill to improve our Paediatric Neurosurgical services.

Monklands - *Peter Paterson*

I have racked my brains to think of something interesting to say but have given up. No great and certainly no cheering events to report over the last year. Most of what's been happening is common to departments around the country. New consultant contracts are being signed and compliant (with something or other) trainee rotas implemented. Seniors have now completed the cycle and are back to being first on call. If it were not for the creaking joints etc one might be deluded into feeling young again. Happy to report that we continue to see a good number of successes in fellowship exams.

One can only hope that despite much of what is happening to our profession these youngsters may yet have satisfying careers.

Lorn and Islands DGH - Jason Davies

Like ducks we glide over the surface while peddling furiously underneath to keep abreast of the almost weekly changes made to our pond: management reshuffles, Clinical Strategies, Solutions groups and constant public consultation processes all have served to confuse. However standing back to survey the scene I realise that there is 'nothing new under the sun'.

Our clinical workload looks to have increased again this year and we have the prospect of working more closely with our neighbours in Lochaber. I see some real advantages to this for both communities but it will not happen without a little effort and foresight on from all concerned.

Rural anaesthesia seems under threat from all quarters. Jenni, Colin and myself look forward to delivering the service in Oban long into the future. We are nothing if not optimistic.

Ninewells - Fergus Millar

We have all been appraised and contracted. Luckily it has been a relatively painless if time consuming process. We're now looking forward to the next round where we expect the management will make even Scrooge seem benevolent! The squeeze is on to deliver even more whilst accommodating rota changes, foundation years, MMC and the hospital at night. I think 2005 will see some major changes in the way emergency health care is delivered with the associated local and national political bloodletting. Exciting times (pass the Kevlar jacket)!! We've been QISed this year and came through reasonably well. It will be interesting to see if this process raises standards or encourages mediocrity.

Our department has expanded as a result of Medical Obstetrics moving from Perth to Ninewells. This has continued the change in work patterns in Tayside with more cross site working. Mike Forster has led the charge from Perth, coming to Ninewells to do obstetric anaesthetic sessions. This change has also allowed us to appoint Niall Purdie as a consultant with a major interest in obstetric anaesthesia. Niall spent a year in Toronto gaining valuable obstetric experience. Iain Levack has taken over the demanding job as CD of Critical Care from Rob Murdoch. We wish him well. Anne Staziker has decided to retire and we wish her a long and happy retirement.

Well done to Cameron Weir on his recent PhD! Further congratulations are due to Judith Joss - twins, Kate and Jonathan Whiteside - also twins and to Carol Macmillan - a son. We've had good success at the final FRCA with 7 out of 8 passes! Thanks to Christina Beecroft for all her effort organising viva practice. I'm delighted it's Christmas time as that means the annual SSA scientific meeting is past and I have managed to negotiate my first year as College Tutor without any major faux pas (that I am aware of).

Oh by the way, this year's operation was a septoplasty and trimming of inferior turbinates. I am assured the best Colombian will be even more enjoyable!!

Royal Alexandra Hospital, Paisley - Jackie Orr

The Acute Services Redesign for NHS Argyll and Clyde is undergoing a further period of discussion and consultation, part of which involves the adoption of "single system working" by the anaesthetic service. The Vale of Leven consultants already provide elective sessions on the RAH site and the two University of Glasgow research fellows are transferring from the Vale of Leven site to the RAH. Solutions have yet to be sought regarding "capacity issues" of theatre utilisation and bed availability within the RAH. Gynaecology services for Argyll and Clyde remain in contingency. The trauma workload continues to increase; trials have demonstrated a need for 4 trauma sessions at the weekend.

The RCA visited in August and delivered a very positive report on the strength of which we are to get a third SpR 1-2. College Tutor, Malcolm Smith, aided by our enthusiastic SpR Jane Duffy and various consultants, has seen 4 SHO's through the Primary this year.

We welcomed Dr Andy Makin in March and are about to appoint the 19th consultant with the provision of a dedicated consultant session for the acute pain service.

There has been a flurry of preparation for QIS, revision of policies, protocols, proformas and the destruction of far too many trees.

Raigmore Hospital, Inverness - John May

Since the last newsletter we have two new Consultants, appointed in December 2004: Kevin (Canavan) Holliday who had already been with us for some months as a locum. Kevin brings his expertise to our team of five "intensivists" as well as to his theatre duties. Old fogies like myself are praying for the day we split our on-call rotas. These new ICU ventilators seem so much

more complicated than the good old "Capes"! A warm welcome also for Ross Clarke who was previously with us as an SpR in 2003. Other appointments to Staff Grade positions are those of Michael Wilkie, Ruth Sinclair, and Menno Verburg who comes to us from Holland via Bristol. We are indeed lucky to have these three very experienced anaesthetists in our department! (I'm still hoping for an invitation to Menno's yacht, which is moored somewhere near Cromarty). On a sadder note we report the illness of Alasdair MacNeil in April 2004. Alasdair is still off work at the time of writing and we send him and Diane our very best wishes and hope Alasdair returns to work soon. Alasdair had such a flair for reporting back from meetings, that in my opinion he should have received the departments' study leave budget in its entirety! He is sorely missed indeed. Sandy Hunter has assumed the role of convener of the anaesthetic department. He was heavily involved in the new consultant contract negotiations and the move to his new position has been seamless. He has managed all this as well as becoming a dad! Congratulations to Sandy and Clare on the birth of Cameron. Meanwhile I strive for early retirement by refusing to learn how to use laryngeal masks. Whom the Gods wish to destroy they first make mad!

Southern General, Glasgow - *Joan Prentice*

Well, the building works at the Southern continue unabated. Will they ever end!

The orthopods, clearly envious of the new gynaecology empire, have set about their own empire building exercise. In a novel twist, they continued to use the operating theatres whilst sharing them with the builders. It was difficult to say whose drills were loudest!

Inevitably, all this expansion has been reflected in an expanding anaesthetic department. In December/January last year we welcomed Daphne Varveris and Lars Williams, both former Southern SpRs, to consultant posts. This year, lest we be accused of excessive parochialism, we will be equally welcoming to Fiona Henderson, John Crawford and Andreas Kopka, who are bringing completely new blood to the department.

In December the we will say farewell to one of our most stalwart colleagues - Anne Mellon - who is retiring. We wish Anne health and happiness in her new life of leisure, and are all looking forward to a really good party!

Again, the movements among trainees are too numerous to mention, but we welcome new members and congratulate those who have had exam successes and promotions.

Finally, the department was greatly saddened in September by the sudden death of Dr Yaa Antwi-Yeboah. Yaa had joined us as a "new start" in August and was busy establishing herself as a well-liked member of the department. It is our loss that we did not have the opportunity to get to know her better.

Shetland - *Catriona Barr*

Experienced GP anaesthetists previously staffed anaesthesia in Shetland, but there has been a consultant led anaesthetic service since 1998. Currently there are two consultants: myself and Patrick O'Connor and a third consultant job has been appointed: Bodyn Poulton, currently a consultant anaesthetist in Norfolk and Norwich. Currently one of the GP anaesthetists provides cover one day a week. The anaesthetic team also includes four dedicated nurse anaesthetic assistants. The dept has a website: www.show.scot.nhs.uk/shb/Healthcare/Shetland-wideServices/Anaesthetics/Index.htm.

Major challenges at present include the re-organisation of air ambulance services - the option currently on the table does not include a locally based fixed wing aircraft for Shetland. This may mean a less responsive service and also the prospect of key clinical staff being stranded on the mainland waiting for commercial flights to return them to work. The Scottish ambulance service is aware of our concerns.

We also see positive developments occurring in the near future. Two of our nurses are to attend the Caledonian University Anaesthetic Nursing Course in 2005. We are developing a nursing led pre-assessment service and purchase of an oesophageal doppler monitor to aid peri-operative management of our colorectal surgical patients. We hope to have a new consultant colleague to join our anaesthetic team in 2005 and with them to build on our achievements in patient care and staff development.

St John's, Livingston - *Duncan Henderson*

We have been in the frontline of the recent changes in healthcare delivery. In the autumn, trauma orthopaedics and acute general surgery were transferred to Edinburgh. Elective work in these specialties is planned to increase. There also plans for the probable concentration of ENT services at St John's to create a Head and Neck Unit, in conjunction with our Plastic and Maxillo-Facial Departments. These changes have caused a considerable amount of disquiet amongst the hospital staff and the local populace - a scenario not uncommon in Scotland at present!

The Primary FRCA courses remain popular with trainees attending from Southeast and Central Scotland and Edinburgh and Glasgow vet schools. The Course Organisers are kept busy (Simon Edgar, Duncan Henderson, Elaine Martin and Samantha Moultrie). We were delighted to welcome Sam as a consultant colleague in November.

Mike Brockway is now CAR, ably assisted by Jeremy Thomas. They're both looking forward to our QIS visit in December.

Stobhill, Glasgow - Roger Hughes

The slow run down of Stobhill continues. In-patient ENT and Gynaecology left for Gartnavel and the Royal in the summer and now, with the exception of Kenny Lamb, Jack McKellar and David Ure we all have sessions at the Royal or Gartnavel. Acute receiving and ICU were to leave next summer but this now depends on Cardiothoracic going from the Royal to the Golden Jubilee (Nugget) - probably delaying the move to 2006.

Barry Evans started as a consultant with us in the spring and Chris Parker has been appointed to GRI but doing nights on call at Stobhill to help as the general rota is now on call at night without juniors (a brave new world).

All of us have signed up for the new contract with various degrees of satisfaction. It's certainly a good deal for those of us who are older and were MPT.

Carol Murdoch has just returned to duty from having her third son - I think work is light relief! David Ure's wife has just given birth to Madeline, their third. It's an interesting time. Michael Martin, Speaker of the House of Commons, and MP for Springburn, has just been given permission to campaign to "Save Stobhill", whatever that means - I don't know if he does. We have already a "Save Stobhill" MSP, retired GP Jean Turner who hasn't made much difference but see this space next year.

Stracathro - Charlie Allison

Our wee surgical sweatshop remains popular with the Angus public & faithful colleagues, but less so with those who dislike operating on two or three fronts. Happily there's a move afoot to restore joint replacement to our repertoire. We still get ministerial & managerial visits (looking for solutions for their own patches) and we were also successfully QIS'd - good luck when your turn comes!

Alban Houghton soon begins his well-earned retirement

after 29 years here. In the right light he still looks about 35, keeping fit with hill walking, nature pursuits & foreign travel - currently he's in India. We don't know if we'll get a home-based successor, or add further to our list of day-trippers from Dundee.

"Top Tottie" Jan Beveridge has taken on a key SAS role in the BMA; and, as NESSA President, I indulged my deviant interests with an Address entitled "FEHV - Anaesthesia, Golf, Whisky, Fitba' and The Music of Procol Harum".

Ion Grove-White occasionally drops in for a chat or a spot of surfing on our broadband. He's still doing locums in the Northern Territories.

The Vale of Leven - Bill Easy

Plus ça change; toujours la meme chose. - Which, very roughly translated means that whilst everything has changed, we are still coping with it!

Looking back at last year's Annals, I am gratified, though sad, that my predictions were fairly accurate. We have ceased to do emergency surgery, but we are doing more orthopaedics, including joint replacement surgery. (Funny thing, hip replacements used to bore me, now I'm grateful to have them!) So we are still here - just. My consultant colleagues and staff anaesthetists do sessions in the Royal Alexandra but "The Final Solution" still seems to evade us, and the rot continues. (Literally as well as metaphorically; our secretarial staff have had to move out of their end of our Portakabin because it was so damp that mushrooms were growing through the carpet! I have examined the growths to see if they might be "magic" or even chanterelles - but no, just fungi!)

Predictions for the coming year: By April our ICU beds will have closed, necessitating a fairly major change to the pattern of medical admissions (Where will they all go?). All my colleagues will then join the Paisley rota, but will probably return over here for a few sessions a week to give anaesthetics for day and short stay surgery.

The trouble is, what will go next? Will there be sufficient support from other specialties to maintain the excellent nurse-led minor injuries unit which has been more successful than we all thought? Will there be enough clinical support for the Medical Assessment Unit, where the nursing staff are extending their scope and skills? Or will a good small hospital finally bleed to death from the cuts it has received? To find the answer, you'll have to wait and see if I still have a column in the Annals next year.

Victoria Infirmary Glasgow - *Graham Gillies*

Perhaps the most prophetic development here in the past year has been the introduction of a hospital shuttle bus service between the Vic and the Southern General to transport staff and specimens. I've not tried it yet, but then they don't make it sound too attractive. As it starts late, finishes early and stops for lunch, its surely not aimed for the benefit of anaesthetists, which is a wee shame because we nearly all now spend part of our week attending lists in the south-west. Gynaecology has now joined ENT in moving to the SGH site. By the time you read this they will have been joined by pathology. Surprisingly, perhaps, the Victoria is currently undergoing the last phase of a multi-million pound ward refurbishment that is truly transformational. Unfortunately, the principle objective of creating more space between beds is being achieved at the cost of bed numbers and we are pondering what service we might lose next. Presumably, they ruled out the alternative approach to achieving this objective by making the beds narrower. More positively, plans are progressing for the substantial Ambulatory Hospital to be built adjacent to the Victoria site, the date for which seems to have slipped to early 2008.

Our consultants have completed the hurdle of settling their contracts without too much blood on the walls and our trainees continue to have some issues with their banding in the new deal, which appears to be a remarkably inflexible device, destined it seems, to please no one. We were recently delighted to welcome Sawsan Ghonaimy as our first staff grade and we congratulate Ronnie Glavin as our new Postgraduate Tutor. The introduction of statutory paternity leave has not gone without notice and our department has since achieved a remarkable level of fertility. We warmly congratulate Stephen Noble, Fiona McHardy, Michael Neil, Steven Jeffrey, Kumar Yathish and Roy Williamson and their partners on their new family additions.

Glasgow Western & Gartnavel - *Colin Runcie*

Little has changed at Gartnavel in the last year. Peter Wallace passed the Presidency of the Association on to Mike Harmer in September 2004 and after many years of contributing both locally and nationally, has now retired. The department wishes him well. His departure represents the passing of a gentler age. Two younger consultants have also left us: Andy Makin to a consultant post in Paisley and John Crawford to the Southern General. The department wishes them the best of luck in their new posts. Brian McCreath has been appointed to fill some of the many holes which have subsequently

appeared. Tom Algie has given up the role of lead clinician after years of unheralded endeavour, Nick Pace continues as Chairman. I have passed the rota baton on to Alan Hope after 2 years of quite exceptional service!

Several trainees have moved to consultant jobs. Caroline Whymark in Crosshouse and Andreas Kopka at the Southern General. Kenny McKinlay has taken on a challenging post at HCI in Clydebank. They will all be missed. Turnover at SHO and SpR level continues its inexorable increase. Malcolm Chisholm's decision to retain our maternity unit means that our many night rotas cannot be rationalised and our trainee complement will soon be in 3 and eventually 4 figures.

On a more positive note, our fears that North Glasgow Trust might not value our efforts were allayed when they funded the substantial pay rise which followed from the new contract. Feelings of warm contentment and goodwill to all persons have suffused the department recently and it remains a stimulating and enjoyable environment in which to work.

Wishaw General Hospital - *John Martin*

The new era has dawned. Those of us who remember the good old days of SHO/Reg/SR nights on call followed by days off wonder why we're back at it again, only older and without the luxury of the next day off. Who negotiated this nonsense?

The consultant body is unchanged for the first time in many years. George Harvey has demitted office as CD, and as is the case in the other Lanarkshire hospitals, Anaesthesia has been incorporated into the Surgical Directorate. Marisa Haetzman has taken on the role of Chief Clinician/Assistant CD. We await with interest the results of yet more reorganisation, hoping that this time it will be a useful exercise.

Otherwise, Wishaw has had a quiet year.

Annual Golf Outing

Prestwick St. Nicholas, June 15th, 2004



Paul Wilson was the lucky organiser of this year's golf outing at his home course of Prestwick St. Nicholas. The sky looked ominous as we approached the venue. "Did I pack enough socks?" and "Perhaps we should consider a Society snooker tournament instead." Were among the thoughts crossing at least my mind. My courage was returned to the sticking place with the sight of Ken Mackenzie (soon to be Captain at Turnberry) leaning into the wind on the first tee and blasting one down the middle. As ever it did not in fact rain on the golf course in fact we think that there might be a Prestwick Ozone Hole since everyone was surprised to find themselves lobster-red with sunburn at the end of the day! The conditions remained very windy though – almost as windy as this article.

The results: Congratulations to Bob Campbell from Inverclyde who pipped young whippersnapper Richard Corry from Ayrshire. Bob had 39

points in the Stableford to Richard's 38. Ayrshire was not to be denied a prize however. Bob Young from Crosshouse scooped the Booby! Ayrshire does seem somewhat to be hogging this distinction as last year's booby scooper was Alistair Michie. A golfing trivia question: as Alistair was the holder of the booby prize for the summer golf event in 2003 and also won the same honour in the spring at Peebles in 2004, does this mean a Grand Slam? Should a Grand Slam be limited to those holding titles in the same calendar year or under the same president? Correspondence on this to the editor please.

PS. did you know? The Stableford system of scoring was invented in 1931 by Dr. Frank Stableford of the Wallasey & Royal Liverpool Golf Clubs and the first competition under Stableford Rules was played on 16 May 1932 at Wallasey.

2005 Golf Outing

Provisionally Turnberry June 14th

Details from Alex MacLeod at Glasgow Western Infirmary or the website:
www.scottishsocietyofanaesthetists.co.uk



Bob Campbell with the Trophy and a useful tube of Society superglue!



Golfers compare their tans at the end of the day



Richard Corry (in red) mentally rehearses his victory speech only to be cruelly robbed



On the tee – Ken Mackenzie



Farquhar Hamilton, John Vance and Rae Webster – dream of open glory!

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