The Annals of the Scottish Society of Anaesthetists

WHERE DO WE GO FROM HERE?

No. 41 January 2001

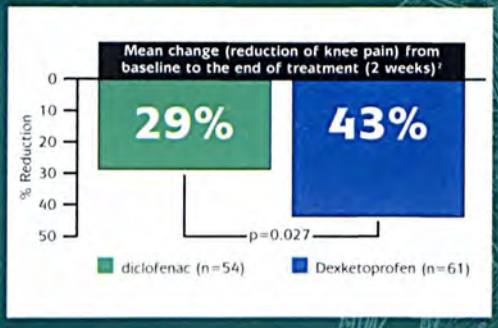
Keral

dexketoprofen trometamol

A refined isomer[1] that's...

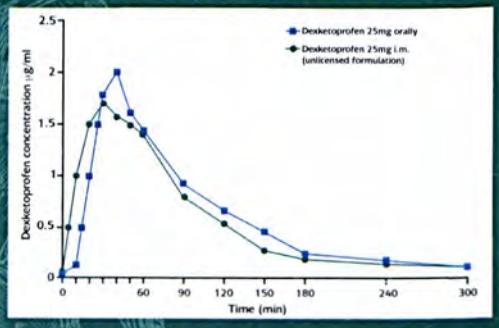
EFFECTIVE...[2]

Dexketoprofen (37mg dexketoprofen trometamol tds) vs diclofenac (50mg tds) in knee-pain reduction associated with osteoarthritis of the knee[2]



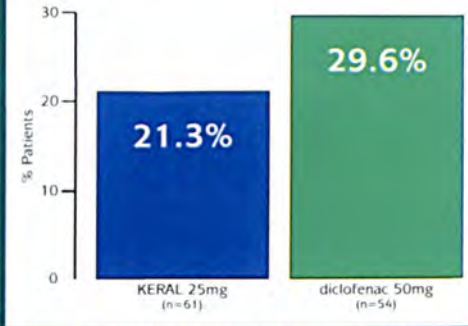
...FAST...[3]

Mean plasma concentrations of dexketoprofen (measured by nonstereo-specific HPLC) after oral and im administration of 25mg (n=12)[3]

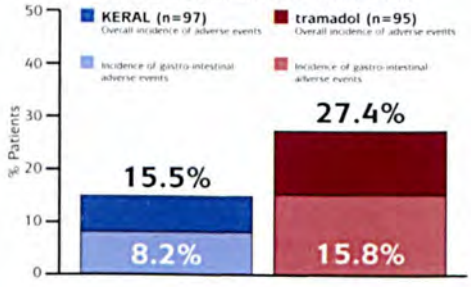


...AND WELL TOLERATED...[2,3]

KERAL 25mg tds vs diclofenac 50mg tds: incidence of at least one adverse event[2]*



KERAL 25mg tds vs tramadol 50mg tds - global incidence of adverse events (p=0.04) and occurrence of gastro-intestinal adverse events[3]



*Assessed in pain associated with osteoarthritis of the knee

Keral 25mg tds should be given 30 minutes before food[4]

Keral® (dexketoprofen). Prescribing Information.
Presentation: Tablets containing dexketoprofen trometamol 36.9mg (equivalent to dexketoprofen 25mg). **Use:** Symptomatic treatment of mild to moderate pain. **Dosage:** Adults: 25mg every 8 hours or 12.5mg every 4-6 hours. Maximum daily dose 75mg. In the elderly or those with mild-moderate hepatic dysfunction or mild renal dysfunction, start with a maximum daily dose of 50mg. Not suitable for children. **Contra-indications:** Sensitivity to dexketoprofen, its excipients or other NSAIDs, NSAID induced nasal polyps, gastrointestinal (GI) ulcer, chronic dyspepsia, active bleeding or bleeding disorders, Crohn's disease or ulcerative colitis, asthma, severe heart failure, moderate-severe renal dysfunction, severe hepatic dysfunction, anti-coagulant therapy, pregnancy and lactation. **Warnings and precautions:** Ensure cure of oesophagitis, gastritis and/or peptic ulcer before starting treatment. Monitor patients with history of GI disease. Discontinue immediately if GI bleeding or ulceration occur (rare). Caution in allergic conditions, haematopoietic disorders, connective tissue disorders, hepatic, renal or cardiac impairment, diuretic therapy, the elderly. May mask symptoms of infectious diseases. Can increase parameters of renal and hepatic function. **Undesirable effects:** Common (1-10%): Nausea and/or vomiting, abdominal pain, diarrhoea, dyspepsia. Uncommon (0.1-1%): Sleep disorders, anxiety, headache, dizziness, vertigo, palpitations, gastritis, constipation, dry mouth, flatulence, skin rash, fatigue, hot flushes, pain, asthenia, rigors, malaise. For details of rare and very rare reports see SPC. **Legal category:** POM. **Marketing authorisation number:** PL 16239/0007 **Package quantities and price:** 20 tablets: £3.90; 50 tablets: £9.75. **Marketing authorisation holder:** Menarini International Operations Luxembourg S.A. **Marketed by:** A. Menarini Pharmaceuticals UK Ltd. **For further information please contact:** A. Menarini Pharmaceuticals UK Ltd, Menarini House, Mercury Park, Wycombe Lane, Wooburn Green, Buckinghamshire, HP10 0HH. **Date of preparation:** December 2000.

committed to pain relief

References: 1. Mauléon D *et al. Drugs* 1996; **52**(Suppl 5): 24-46. 2. Eguidazu I *et al. Br J Rheumatol* 1998; **37**(Suppl 1): Abs 292. 3. Data on file. A. Menarini Pharmaceuticals UK Ltd. 4. Keral Summary of Product Characteristics. A. Menarini Pharmaceuticals UK Ltd.

A. MENARINI PHARMACEUTICALS UK LTD

KER/NLA/093/12.00

Photo-processing:
Forfar Photocentre

Printed by Fairprint Ltd.,
West Henderson's Wynd, Dundee.

editorial

Welcome back to the Annals, expressing all that's best in Scottish anaesthesia - both serious & comic. Donnie Ross' beautifully executed cover poses the question "Where Do We Go From Here?" Our President Douglas Arthur suggests much *has* to change to stabilise the Society over the coming years, especially now that we have largely passed on the political baton to others. In contrast, Douglas reckons little has altered in a century of day surgery.

Another topic this year - identity (or "Who Wants to be an Anaesthetist?") - follows the Royal College's public relations day last May. In the summer I was delighted to receive a patient's perspective from First Minister Donald Dewar but then we were greatly saddened by his early death. I'm very grateful to Shelagh Winship & Nick Townell for their insightful offerings on our "image" and Grant Hutchison for his rousing valedictory song to his retiring C.D.

Mal Morgan upheld Welsh pride at Peebles by beating us all soundly at golf, then slayed a few *Sacred Cows* in his guest lecture. Ed Charlton chose the quest for patient safety for a most colourful Gillies Lecture. I am also pleased that Clinical Standards Board Chief Executive David Steel was happy to outline its objectives & show its relevance to anaesthetists. Donald Thomas reports from the World Congress in Canada, Lindsay Donaldson reels off a report from a lively Trainees Meeting and Stuart McLellan presents his prizewinning paper. Alistair McKenzie stamps his hobby on us, Wagih Antonius flashes Peebles dance photos, Alex Macleod chips in with a great golf report and I hope I'm not bankrupt of ideas conceptualising a current-day Anaesthesia Dome.

Finally Alastair Spence pays fond tribute to two pillars of Scottish anaesthesia. We also lost two colleagues "in harness" - Nick Gordon & Tom Houston - thus I dedicate this issue to these fine, caring doctors who tragically died too soon.

LESS MANAGING, MORE MONEY & A CLIMATE OF COMPASSION,PLEASE!
Your Editor continues to feign modesty in pontificating, but wishes to plead for greater clarity in Health Service organisation & funding. Many of us spend great chunks of time engaging in frustrating role-play with our management friends, both in-house & those engaged on a consultancy basis, searching for truth & those orgasmic win-win situations. As anaesthetists usually deal in decision processes lasting seconds, or at the most minutes, we frequently find these procedures needlessly long drawn out & tedious. However, if we're not to be marginalised, we must accept the boring bits & get involved, in order to project our true worth to the NHS, regardless of how it is to be "planned".

The important message to our political masters must be for more *real* money, less spin and a gentler, more enlightened climate for medicine to flourish. It is really in no-one's interest, particularly patients', to talk up a blame culture and slide down this treacherous road to litigious, defensive medicine. In turn, we should strive to be kind & thoughtful to each other within the hospital community. Life's hard enough with barbs from the press & politicians outside, without staff sniping for fun, turf-wars or personal advancement.

Thanks go to *Blease & Menarini*, Bruce Robertson at *Forfar Photocentre* and the *Fairprint* team for sharing an enthusiasm for the journal's continued well-being. Next year will be a Regional Issue and with *your* help we'll travel to a' the airts!

Charlie Allison

a patient's view

DONALD DEWAR (1937-2000)

SCOTLAND'S FIRST MINISTER

I am very well aware of the importance of anaesthetics to the medical profession and, of course, centrally to the patient.

I am afraid I have to admit to strong connections with this particular speciality. I come from a medical family where anaesthetics was well represented by an uncle and indeed currently by a cousin.

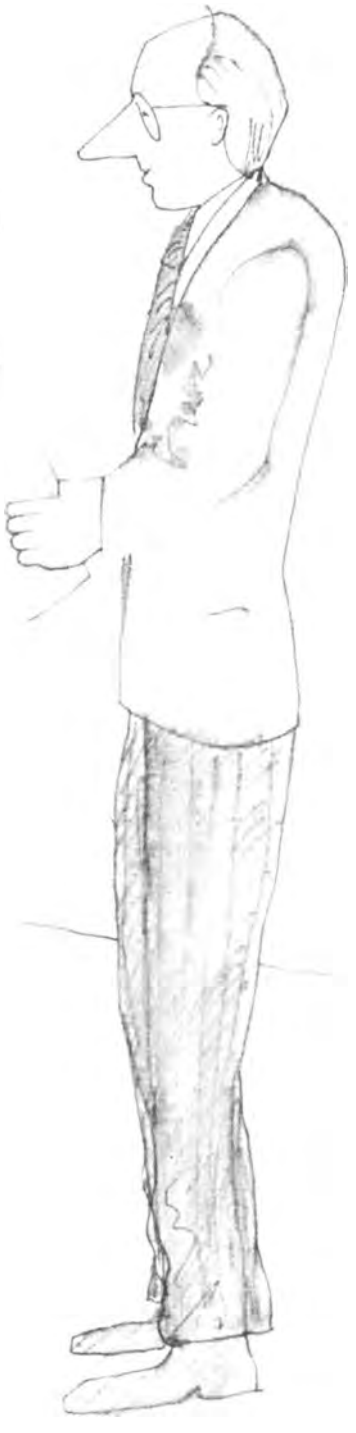
In the public mind the surgeon traditionally has been the central figure at an operation, but perceptions are changing.

The role of the anaesthetist in the operating team, the skills and range of his (or her) responsibilities, are more & more appreciated.

Anaesthetists are at the leading edge of the new techniques which do so much to improve literally life chances and to sustain the reputation of the National Health Service.

Donald B. Dewar.

Sadly Donald Dewar died in October. He was a man of intellect & good humour, a beacon of integrity and an example to those outside politics as well as within.



PICTURE BY DONNIE ROSS

presidential address

"EAST WEST, HOMES BEST"

Douglas Arthur *Royal Hospital for Sick Children, Glasgow*

It is a well-known adage that it is better to travel hopefully than to arrive. I learned this fact at an early age when, in the company of other school children, I watched an embarrassed Royal Naval Captain park his extremely large battleship on a spit at the entrance to the Gareloch rather than steer the vessel into the loch. Over many years, travelling has proved to be not only tremendous fun, particularly in the company of great friends, but of considerable professional interest.

A year of working in Toronto Sick Children's Hospital proved that, in spite of generous funds, the clinical care varied little from that at home. Subsequent visits have shown that generous funding did allow for grandiose capital development at the new hospital, which now appears more like an expensive shopping mall. Visits to lecture have shown me generous health funding in countries such as Finland. The Lapland Central Hospital in the Arctic Circle boasts an elegant marble entrance and splendid theatre & ICU facilities, although patients are few & widely dispersed. In spite of -25° Celsius the welcome was extremely warm.

A similar welcome was experienced within the tropics in Southern India at Trivandrum SAT Children's Hospital. Elegant marble halls were replaced with huge crowds in dark remnants of the Raj acting as out-patient clinics. Special wards for diarrhoeal illness were usually overcrowded with patients in & under beds. Parents were to be seen at the Kerela equivalent of *"The Steamy"* doing the laundry for their own children. This picture does not sit well with recent advice given by a past U.K. government minister that patients should travel to India for treatment to relieve our NHS waiting lists.

A visit to China demonstrated the dedication & hard work of anaesthetists & other staff. A consultant was paid less than the taxi driver who transported me, yet this same professor was writing up his second 10,000 epidurals in children. The children's hospital, one of several in Beijing, was similar to many in the West. It was only on visiting district hospitals in smaller cities that one became aware of huge cultural differences. Traditional pharmacies, dispensing not only minerals, vegetables (from tree bark to herbs) but also animals (such as snake & cockroach-like creatures) sat next to acupuncture clinics. Patients appeared to be totally unconcerned by tourists observing their treatment. This *moxibustion* appeared to consist of acupuncture needles strategically placed in the patient's rear-end & then set on fire! Such forms of income generation would not fare well with our Trusts, or patients.

A recent visit to Dubai gave me an opportunity to see the world's tallest hotel, *The Tower of the Arabs*, 1000 feet high & lined with acres of gold-leaf. The top suite, costing a modest $30,000 per night, was designed by a company that rose phoenix-like from the ashes of the Scottish NHS's Common Services Agency - W.S. Atkins, who designed our new day surgery & theatre complex. This raises certain questions in my mind: will the Dubai doors need replacing within a year & will their gold-leaf start to peel at the same rate as the decor in our facility? Perhaps we should have had the gold leaf!

Travel does broaden the mind. That is why many doctors do so for career advancement. Such travel isn't new or associated with relatively easy jet transport. James Nicoll, a surgeon in Glasgow at the turn of the last century, was a great traveller who reached as far as Moscow in his search of knowledge - well before the advent of the aeroplane. Speaking at a BMA meeting in Belfast in 1909, he reported his figures & philosophy for day surgery. Working in the somewhat primitive surroundings of the Sick Children's Dispensary, still visible in Glasgow to this day, Nicoll performed surgery we would still consider routine today.

JAMES NICOLL

He also performed surgery that no paediatric unit would consider for day treatment at the present such as spina bifida (36 cases), mastoids (167 cases), cleft palate (406 cases) and talipes (610 cases).

Nicoll's numbers are impressive. 1899-1908

Total 8988 cases

James Nicoll 7392 cases

It took a further 80 years before the Hospital was again able to report a similar volume of surgery carried out on a day case basis.

In his talk of 1909 Nicoll put forward a series of tenets by which he was guided when performing day surgery. These principles are as valid today as they were nearly a century before.

1. Day surgery is more economical
2. Careful selection of cases is essential.
3. Avoidance of separation from parents is beneficial.
4. Bed rest in children is difficult & may be harmful.
5. Follow up at home is valuable.
6. The main idea of admission is *the supposed benefit of trained nursing staff.*

Nicoll himself funded a house to care for parents from far off places just as Ronald MacDonald has done some ninety years later. He also funded the nurse to visit patients in their own homes, a fact that brought him into conflict with the board of governors.

It is clear that in this age of low morale & over-weaning bureaucracy we should perhaps take heart in the fact that little has changed over 100 years. The medical profession still moves forward in spite of the hurdles!

It is also clear that the patient came first and the doctor acting as his champion encouraged day surgery. It was also true that there were & still are clear economic benefits for day surgery; but these did not & rightly still do not assume the major indication for day surgery in children, but come after clinical & social factors as the main indications for surgery on a day basis.

When considering day surgery it is clear that without first class organisation & communication from the outset disasters are likely. The organisation can in its own way be a most daunting aspect of day surgery for the patient & parents. This has to be tempered to efficiency without complexity.

We no longer interview patients in the full public view of a seething Victorian waiting hall as in Nicoll's days. Privacy is accorded to all and in particular those in the somewhat sensitive days of adolescence where separate accommodation is provided. Play areas for small children have to be designed to separate those pre-op & unable to eat or drink from those post-op who are actively encouraged to do so.

Prior to undergoing day surgery, appropriate patient selection is paramount. Agreement must be reached with surgical, nursing and anaesthetic departments on the suitability of particular procedures & patients so that last minute cancellations are avoided.

Regarding appropriate surgery, this may require revision from time to time. Problem procedures include tonsillectomy (most children in the UK stay overnight) open eye surgery, which is becoming more day surgery orientated and orchidopexy, which can cover a range of procedures from the simple to complex intra-abdominal surgery. The introduction of invasive cardiology has seen the start of cardiac surgery as day cases.

Major contraindications are difficulty with analgesia as in much orthopaedics, the possibility of life-threatening haemorrhage as in tonsillectomy or persistent nausea & vomiting or weakness associated with local anaesthesia. Patients with major intercurrent medical disease should be excluded in most cases in particular diabetes, which is invariably insulin-dependent in children. Untreated cardiac disease is a contraindication to day surgery. However patients with major oncological disease or other severe chronic illness, which is under control, may be suitable day cases dependent on the hospital facilities. Anaesthetic exclusions naturally include inexperienced anaesthetists.

Although day surgery is in the main straightforward, it requires experienced surgeons & anaesthetists to avoid complications. Anaesthesia of long duration may exclude day procedures. Obviously those with a family history of malignant hyperpyrexia or children with difficult airways are not suitable for day surgery, as are those who have had a sibling who has died from sudden infant death syndrome.

Exclusion on social grounds may be appropriate in certain circumstances such as the single parent with more than one child, poor social circumstances or long distances to travel.

Exceptions will have to made with experience. I recall a child from Vatersay about to be sent home because of a runny nose. His journey had started two days before in an open boat to Barra to catch the overnight ferry to Oban & from there he travelled by train to Glasgow. Not only clinical judgement but also a knowledge of geography is required!

Patients & parents require detailed but simple written instructions as to where to go, "when & how" with regard to fasting, medications, clothing and in particular parking, which should be provided preferentially for day cases to encourage the system.

The instructions with regard to fasting must explain the importance of the process & be simple to understand - such as 6 hours for solids, milk or bottle-feeds, 4 hours for breast milk and 2 or 3 hours for clear fluids. The latter can be given under control within the Unit particularly for cases later in the day.

It is on admission that the "organisation" starts to overwhelm the poor patients. They can be seen by up to seven separate individuals from the clerk through nurses to the anaesthetist & surgeon. All ask variations of the same questions & may give a variety of explanations, which are more likely to confuse than enlighten at a time of considerable stress.

It is difficult to see a method of avoiding this as long as nurses & doctors have their own processes to follow.

How when we come at last to consider the operative procedure itself, there are several important factors to take into account. The majority of these do not concern the anaesthetic itself.

The multitude of documents published by government bodies such as the Audit Commission or the Department of Health, by the Royal Colleges of Surgeons, Paediatrics & Child Health and by the pressure group Action for Sick Children (previously the National Association for the Welfare of Children in Hospital) has resulted in a climate where certain conditions require to be met. Facilities both geographical & in personnel must be available to allow parents to accompany their child to the induction room.

There is great public antipathy to intramuscular injections. Premedication (if used) should be by the oral route. Local anaesthetic creams have made intravenous injection virtually pain free and this combined with parental presence has reduced the requirement for premedication.

Certain cases *will* require some form of medication such as trimeprazine (alimemazine!) as an antiemetic such as squint patients. Others may require sedation. Midazolam orally, often heavily disguised in Coca Cola or other caries-producing liquid, is the most popular.

Many of our patients drive one of a stable of electric vehicles to the theatre, where extraction from these cars can be a problem as can "driving under the influence" following premedication.

Virtually any agent can be used in day surgery, but with the use of local analgesia creams an IV route is preferred.

Ketamine can be used for certain cases such as the measurement of intraocular pressure and if used IV the post-operative stay will not be prolonged. Dysphoria is also uncommon in the child under 7 or 8.

We have shown the recovery profiles of thiopentone & propofol to be similar with regard to awakening, time-to-drinking & discharge. However it is clear that propofol is actively anti-emetic & is thus preferred.

The chubby 18 month child is a challenge to even the most experienced anaesthetist and so inhalation induction is not infrequently the first choice.

Halothane, for long the mainstay of paediatric anaesthesia has now unfortunately been supplanted by sevoflurane, once discarded as of little value, even though all cases of hepatitis reported in children after halothane are suspect.

Sevoflurane induction is smooth but is no shorter to surgical anaesthesia. It is mildly epileptogenic and if used for maintenance can result in uncontrollable excitement even in the presence of adequate analgesia.

Intubation was for long a relative contraindication to day surgery because of the possibility of post-op stridor usually occurring just as the child reached the top deck of the 57 bus on his way home. The laryngeal mask has changed all that. It allows freedom for anaesthetists to perform local blocks in safety & for surgeons to carry out procedures around the head & neck.

All inhalation agents have been used for maintenance. though enflurane is virtually never used in children. Its characteristics mean that MAC is so high some young children do not reach surgical anaesthesia with the normal vapouriser. It cannot be therefore counted as an anaesthetic in the young, who also have a lower seizure threshold which also mitigates against the agent.

T.I.V.A., much beloved of our adult counterparts is not very satisfactory in children but can be used for procedures such as lumbar puncture & cutaneous lasers.

Virtually no child leaves our unit without the benefit of local anaesthesia. The techniques employed vary from local infiltration, nerve blocks & caudal epidurals.

The advantages are clear. Long acting post-op analgesia is the most important as this virtually obliterates the need for opiates which should be avoided if possible because of the emesis caused.

Certain local blocks such as the greater auricular block significantly reduce post-op emesis. Side effects do occur as with post-op weakness following misplaced agent in an inguinal block or rarely after a large dose caudal block. This is reduced by using 0.25% or even 0.125% bupivacaine without seriously affecting analgesia.

Day surgery now forms more than 60% of all general surgery and up to 90% plus of ophthalmic surgery in children. The consultant based service could lead to a reduction in training opportunities for both surgical & anaesthetic trainees. This must be avoided as the opportunity to learn blocks in particular is great. Many will learn their first blocks on the unconscious child & then carry on with confidence in the adult.

Another consideration I regard as important (and was fortunate enough to be in a position to influence) is the presence of windows in the theatre. Apart from the ability to see the rain stream down, one can watch lengthening "shadows steal across the sky" as the trainee surgeon allows fibrosis to overtake his stitching prowess.

Pressures from the aforesaid organisations suggest that recovery areas must also be suitable for children who should be separated from adults and should allow early access to parents either in recovery or in a second stage recovery area.

Children should be encouraged to drink & eat as soon as possible following day surgery. With modern anaesthesia, there is no logical place for prolonged post-op starvation just as pre-op fasting has been reduced.

It is clear from experience that if day surgery is to be acceptable & to succeed, the main ingredient must be adequate post-op analgesia. Clear post-op instructions must be given for each procedure (both verbally & in writing) which should include analgesia & numbers to call when in distress.

The presence of the nurse, as advocated by Nicoll at the start of the last century, within the unit who will visit the patient & more importantly the parents the next day gives added confidence at a stressful time. She can give assistance with dressing changes & analgesia.

Discharge criteria are similar to those for adults. The child is however even more suited to day surgery as he or she brings with them their own carer who has been used to dealing with situations often more grave than those experienced after a visit to the day surgery unit.

Child-friendly decor, masses of toys, electric cars, half decent food and, most important of all, adequate analgesia can make the day such fun that some of our young "clients" have to be dragged screaming to the exit.

Nicoll stated in his talk on day surgery in 1909 that *"infants and children in a ward are noisy and not infrequently malodorous!"*. In Nicoll's day patients were wheeled in their beds on to the balconies. Now we send them home to the undivided attention of their parents.

BEAUTIFUL BUILDINGS FOR A NEW AGE:
THE HOTEL (DUBAI) & THE HOSPITAL (TORONTO)

DOUGLAS' ANAESTHETIC TELETUBBIES
HALO, SEVO, EN & ISO

ANOTHER SATISFIED
CUSTOMER

CONTENTED DRIVERS AT ARNOLD CLARK MOTORS (YORKHILL BRANCH)

HANDOVER: DOUGLAS RECEIVES WARM CONGRATULATIONS FROM IAIN GRAY

SURVEYING THE SCENE FROM THE PRESIDENTIAL SUITE AT PEEBLES

ON THE PEEBLES PODIUM

THE SOCIETY PRESENTED THIS GAVEL (DESIGNED BY HAMISH FINLAY) TO THE NEW BOARD OF THE ROYAL COLLEGE OF ANAESTHETISTS IN SCOTLAND

presidential year

Douglas Arthur *Royal Hospital for Sick Children, Glasgow*

Donald Dewar, Scotland's first First Minister, was well connected with anaesthesia, with at least two relatives members of our Society. You will have seen that he generously contributed to our Annals prior to his untimely death. Donald's major contribution to Scottish politics was to firstly advocate devolution, then to see it through to fruition. Whatever one's personal views, devolution is here & is going to have a significant effect on our daily work.

Your Society was at the forefront in assisting the Royal College of Anaesthetists in establishing The Scottish Standing Committee in the first instance. We have recently had some involvement in the birth of the new Board of the Royal College in Scotland, set up to give it a more substantial presence here. This will hopefully lead to more direct access to the corridors of power with regard to matters concerning standards & training in anaesthesia without total reliance on the goodwill or otherwise of the established Scottish Royal Colleges.

The Association of Anaesthetists, long a powerful voice South of the border (and to be fair in Scotland as well) has now put in motion the establishment of a Scottish Standing Committee, to be elected by & from its members living & working in Scotland. Your Society will have a co-opted member on this Committee, which I hope will be able to broach the more mundane, less esoteric but nonetheless important aspects of our professional life (working conditions and dare one say it money!) within the plush pile carpets of St Andrews House or the upturned boat that has yet to sink in Holyrood. Concepts that are not allowed to sully the ruminations of Royal Colleges.

Devolution will have direct effects, such as on the NHS plan. The English already have theirs - ours is yet to appear. Down South they've been given notice on giving dental anaesthetics outwith the hospital setting - when will we have the same notice? These, and topics such as these, will be for our new bodies to pursue in Scotland.

Your Council has given much deliberation to the future. Our Annual Meeting in Peebles has by & large been ill attended by the younger section of our specialty, the new consultants & trainees. We are the only forum in Scotland where all topics related to your everyday work can be aired, from lofty ideals to pedestrian anxieties. Without significant presence from members these matters cannot be pursued. The increasing pressure for CME, appraisal, assessment & revalidation has made us look at the academic aspects of the meeting with a view to increasing this at the expense of the more bureaucratic side of the AGM.

The Trainees Meeting this year, as in the past, was held over two days in Stirling. The programme, both academic & social, was quite superb. Unfortunately the event was partly marred by a fairly small attendance. It is understandable that with reducing numbers of trainees it is more difficult for departments to allow many to be absent for two days - it's perhaps easier to allow two trainees away for one day than one away for two. Cost could also be a factor. This year we share our trainee meeting with the Association's GAT in St Andrews and we hope for excellent support. In the meantime, Council will re-examine the format of future Trainees meetings.

I would like to acknowledge the financial support of *Portex Ltd.* over many years and in particular the contribution of their Chairman George Kennedy, who recently retired. The Society made a presentation to George at Stirling. I'd also like to express the Society's gratitude to Lindsay Donaldson, Alan Thomson & Alec Patrick for organising, yet again, that meeting and to Gordon Byers & Kathleen Ferguson for arranging the Scientific Meeting in Aberdeen.

It has been a great privilege and a pleasure to have been your President over the past year of considerable change. As in all Societies, it is the Office bearers who carry the day-to-day burdens and ours have done so magnificently. To enable them to continue their excellent work, and to maintain the health & vigour of the Society, I look forward to seeing many of you at our meetings in the "True Millennium".

Douglas Arthur

an anaesthetist's view

ANAESTHESIA "BLUNDERS ON"

Shelagh Winship *Perth Royal Infirmary*

Some years ago a friend of mine, a fellow anaesthetic registrar at the time, had the dreadful experience of an unanticipated paediatric cardiac arrest at induction of anaesthesia. The child, a little 3 year old girl, who was scheduled for minor day case surgery, was resuscitated, but died from intractable cardiogenic shock some hours later. A postmortem examination revealed an undiagnosed cardiomyopathy.

In those days we feared two things. The first was our conscience, and to this day if my friend ever has to visit the hospital where this event took place, he spends some time sitting in the car park with heart pounding, brow sweating & hands shaking, while he tries to "get a grip". The other worry was litigation, and a solicitor named Rex Machin had a particularly fearsome reputation amongst doctors in that region.

The last few years have seen the awakening of a new threat: the insatiable appetite of the media for stories which discredit doctors. One of the latest of these stories touched the anaesthetic world.

In June, a young woman named Debra Law was given an anaesthetic by a trainee anaesthetist after an ectopic pregnancy had been diagnosed. According to accounts, oesophageal intubation and aspiration of gastric contents occurred, resulting in hypoxic brain damage from which she died a few days later.

The papers went to town on the story, with publicity which the organisers of National Anaesthesia Day could only have dreamed of. Although no inquiry into the incident had taken place, it was reported as yet another "medical blunder" & "botched medical procedure".

The *Scotsman* newspaper in particular had a field day, suddenly awakening to the fact that anaesthetists are doctors, devoting an editorial to the subject, calling for a fully trained anaesthetist to give every anaesthetic.

It has become apparent that a policy of the present government is to appeal to the masses: frequently this involves denigrating & undermining professionals. The media also appears to have been given *carte blanche* for libellous speculation and for whipping-up a lack of confidence in the abilities and judgement of those professionals in the minds of the public.

It is worryingly reminiscent of Chairman Mao's humiliation of intellectuals during the cultural revolution: sent to work as peasants on farms. Sadly no lessons appear to have been learned from the ridiculous tragedies which ensued.

To highlight this point, just compare the reportage of another catastrophe which emerged on the same day that the Debra Law story broke.

A light aircraft carrying a patient from the Isle of Man to Liverpool for medical treatment had crashed in the Mersey Estuary, with five lives lost.

Given that human error had been implicated in several recent high profile air accidents, one might have expected this crash to be reported in a similar vein to the anaesthetic case. But no, there was no hysteria, no speculation of "blunders" or "botched procedures". The facts as known were presented calmly. An inquiry would be held later.

Another incident sticks in my mind from that very same day.

I had spent a very weary half-hour on the orthopaedic wards talking to a middle-aged lady prior to her hip replacement. She was a heavy smoker with a wheezy, irritable cough and rather poor dentition. She insisted that she absolutely *must* have a general anaesthetic, while I tried to persuade her that a neuro-axial block would be far safer.

The media presentation of failed intubation as a medical blunder, rather than a recognised complication of anaesthesia, surely leads the public to believe that any anaesthetic will be completely straightforward, unless the anaesthetist concerned is incompetent. Government ministers encouraging patients to question & challenge their health-care professionals doesn't help.

Do passengers tell 747 pilots how to fly the plane? Do we advise the plumber on how to repair our pipes? No, of course not.

Why then will patients not listen to the advice of someone with a medical degree, specialist fellowships and 15 years anaesthetic experience?

So consider the irony of all this. On the one hand, this government is attempting to stamp out "the culture of the consultant as God", to end "elitism" in intellectual establishments and to break down barriers between nursing & medical colleagues. Yet, as soon as something goes wrong, the *Scotsman* calls for all anaesthetics to be given by a fully-trained anaesthetist. Doesn't that lead to some interesting contradictions?

Last June a discussion paper, written by the Director of Nursing Services, appeared in Tayside. Amongst its proposals was the expansion of the role of nurses in theatre: anaesthetics could be given by nurses ("well established elsewhere"), nurses could insert arterial lines & CVPs and perform epidurals. (Just for fun, imagine the number of nursing modules *that* would involve: a module on anatomy, one on equipment, one on how to recognise a pneumothorax, how to insert a chest drain, how to explain to a patient that you need to do a blood patch via another epidural to cure the post-dural puncture headache! Why not just go to medical school and have done with it?)

All this at a time when there's a woeful lack of funding & facilities in Scotland even to enable nurses to train as anaesthetic *assistants*.

Over the last century, enormous improvements have been made in the provision of safe anaesthetic services, by virtue of a combination of hard work & discipline, self regulation, research & evidence-based practice, increased involvement in peri-operative care and emphasis on good quality training. Anaesthetic deaths, once common, are now rare.

Yet we appear to have shot ourselves in the foot: the public, and even some of the nursing profession, believe that giving an anaesthetic is so easy and straightforward that one need not be medically qualified to do so, and should a mishap occur then it *must* be as a result of ignorance or wilful negligence

What should be our response? Should we continue our draining struggle for excellence in the face of media attempts of defamation? Or should we now accept a lower standard of care from less-well-trained non-medical staff, praying that we ourselves never need an operation? Or is there anyone out there willing to glamorise the profession with an ER-type TV script based around a hunky, handsome Dr Gasman Kildare?

Let's face the sad fact - most members of the public don't really care, until some "botched anaesthetic procedure" is about to happen to them!

You are cordially invited to attend

ANNUAL GENERAL MEETING

Peebles, April 22nd. to 24th. 2001

G.A.T. (FOR TRAINEES)

St. Andrews, June 13th. to 15th. 2001

ANNUAL SCIENTIFIC MEETING

Dunfermline, November 23rd. 2001

THE UROLOGIST, THE ANAESTHETIST, THE PATIENT & THE ANAESTHETIC NURSE

A ONE ACT PLAY BY **Nick Townell FRCS** *Tayside Teaching Hospitals*

06:00 Alarms ring throughout the land.

The Urologist rises for the third time, having already been disturbed twice during the night to assist his SHO in the earliest stages of his post-graduate career. The Anaesthetist rises for the first time, having spent the night dreaming of improving his golf handicap. The Patient stirs for the umpteenth time, restless in the knowledge that in three hours he'll be on the operating table. The Anaesthetic Nurse decides to wait for another ten minutes before facing the mirror & the thought of another day tending to every need of those she's been trained to serve.

08:30 Operating theatre in a major, major white-elephant teaching hospital.

The Urologist arrives for his morning list, having spent the last hour on the wards checking his patients & discussing various problems with the ward sister. The S.H.O. is still in his bed, as junior doctors are not allowed to rise before 9 o'clock due to new European working time directives. The Anaesthetic Nurse arrives. She immediately checks all the machines and prepares the drugs in readiness for his arrival. The Patient comes to theatre and is shunted into the anaesthetic room in readiness for his arrival.

09:15 Operating theatre in a major, major white-elephant teaching hospital.

He arrives! Full of hubris, having just completed 9 holes at the local links in three under par. The Ursologist awaits an apology for the delay. The Patient waits for an apology too. The Anaesthetic Nurse knows better!

09:45 Coffee room in a major, major white-elephant teaching hospital.

The Anaesthetist has his first coffee of the day with his colleagues, while discussing the excellent qualities of his Anaesthetic Nurse; for it is she who made & provided the coffee he's drinking, while through in theatre she & the Surgeon are battling to improve the well-being of the above mentioned Patient.

10:15 Theatre in a major, minor (due to spending cuts) white-elephant teaching hospital

The Urologist has left the table after removing his scope. The Anaesthetic Nurse now reverses the patient. The Anaesthetist wanders in from coffee, extubates the patient and leaves for another drink to quench his thirst & improve his caffeine levels. The Patient is then wheeled out as the daily conveyor belt grinds into action. The Anaesthetic Nurse prepares drugs, proud in the knowledge that her coffee has been so appreciated.

10:45 Theatre in a minor, minor (due to increasingly crippling spending cuts) white-elephant teaching hospital.

The next Patient arrives, scared to death by horrific stories in the local press about crumbling standards of care in this particular institution. The Anaesthetic Nurse gently requests the pleasure of his company, as long as he can bear to ease himself away from his personal recliner adjacent to the percolator in the coffee room. He graciously accepts her timeous invitation. The Urologist has just finished writing the notes & 24 hr. fluid regime for the previous patient and now has three bleeps to respond to, before scrubbing for the next case.

11:15 Operating theatre in a local third world (due to horrendously debilitating spending cuts) white-elephant teaching hospital.

The Urologist amuses himself with another variation on a theme of Nintendo (level 10), whilst the Patient constantly chatters in an unsuccessful attempt to keep his Anaesthetist awake.

11:45 Operating theatre in a local third world semi-detached rabbit hutch with rising damp, white-elephant teaching hospital.

The Urologist reaches the climax (at level 18) and the game is over. The Patient drifts off to sleep. The Anaesthetist is gently woken by the dulcet tones of his ever-attentive Nurse who has prepared yet another cup of her outstanding coffee. By experience this is usually enough to stimulate his brain, allowing him to finish the daily Times crossword.

12:15 Operating theatre in a local third world semi-detached rabbit hutch with rising damp, (downgraded due to no money) white-elephant district general hospital.

The Urologist amuses himself with yet another, but much bloodier version on a theme of Nintendo (level 20). The Patient continues to chatter away whilst the Anaesthetist resumes his slumbers.

12:20 Same place, still open!

Blood pressure drops, the Patient vomits. The Anaesthetic Nurse grabs a sucker, pours in colloid, monitors the pulse & checks for inhalation, at same time as calling on a porter to bring some biscuits to accompany the next cup of coffee she'll soon be preparing for him. He stirs, views (through slits) the resolving problem and lapses back into blissful sleep . . . *the Old Course, 17th tee, aim straight over the hotel, down the middle of the fairway and then up onto the green . . . . gosh, if only young Monty could play this well !*

12:25 As above - frequently described as "a centre of excellence"

The Patient feels much better and profusely thanks the "heaving shape", who is currently snoring at the head of the table, before himself drifting off to sleep. The "shape" awakes and is complemented on his handling of the situation by the Anaesthetic Nurse, who now presents him with coffee & biscuits. The Urologist writes up the casenotes, fills in the fluid regime, answers two more bleeps & dashes off to the ward to see an emergency.

12:30 LUNCHTIME

The Patient is wheeled away to be post-operatively processed on a Gynae ward (due to the sudden closure of six urology beds due to a lack of funding). The Anaesthetic Nurse clears away the morning's mess and prepares for her first coffee of the day. The Anaesthetist disappears to you know where! The Urologist prepares for an hour of answering letters, arranging lectures, telephoning GP's, discussing waiting lists with a hospital administrator's answering machine (they are not contracted to work during the lunch period). He will then retreat to one of his 3½ hour afternoon clinics.

19:00 Various Venues

The Urologist & a surgical colleague finally arrive on the first tee at Moorfield, having left the hospital just 10 minutes earlier. They hope they'll have enough light left to play nine holes tonight. The Anaesthetist views them from the Bar having just completed two rounds in the weekly Anaesthetic Department Challenge. Drug reps supply refreshments; 3 CME points are awarded per round (with two extra for the winner & six given for a hole-in-one). Back on the Gynae ward, the Patient is well on his way to recovery and thanks the nurses for placing him in such pleasurable surroundings! Having returned from work, picked up her children, hoovered the house, sorted the washing & ironed her partner's shirts, the Anaesthetic Nurse now prepares dinner for her husband who will soon return from his important golf match!

CONCLUSIONS?

- Technology keeps Urologists occupied and Anaesthetists asleep.
- Anaesthetists communicate most satisfactorily in REM mode.
- Patients get in the way of a good cup of coffee.
- If you want an easy life - become an Anaesthetic Nurse!

The Stirling Highland Hotel was the new venue for our fourth Trainees' Meeting, which opened with a welcome from President Dr. Douglas Arthur.

The first session dealt with the topical subject of evidence-based medicine. Drs. Daniel & Simpson, both from Glasgow Royal's ICU, gave very clear accounts of two areas of controversy. The evidence surrounding peri-operative beta-blockade appears conclusive; it's the implementation which can be technically difficult. In the management of averting renal failure, salty water is what the evidence suggests is best.

Next we heard of the medical & surgical management of a very common problem - heart failure. Both lectures where very informative with Prof. Dargie giving a clear medical overview and Dr. Reeve talking about surgically remodelling the heart in order to improve efficiency.

A lovely lunch was followed by a session on regional anaesthesia, where all four speakers delivered very clear accounts of their specialist fields. Dr. Coventry detailed his very successful axillary methods, Dr. Serpell described lower limb techniques, Dr Smart discussed head & neck blocks and Dr. Johnson from Bristol shared the secrets of successful ophthalmic anaesthesia.

Prior to the SIMS/Portex lecture, Dr. Arthur presented Mr George Kennedy (Chairman of SIMS/Portex) with honorary membership of the Society - the first to be given to a non-anaesthetist. Our gift and a traditional beverage to be taken from it were received with great enthusiasm!

Dr Elizabeth McGrady, who with Dr. Pam Cupples was responsible for our first two-day meeting, gave this year's guest lecture - a tremendously interesting & entertaining look at the History of Obstetric Anaesthesia in Glasgow. Slides depicted instruments & apparatus and pictures of the original hospital, which by all accounts hasn't changed a great deal! This excellent account ended the day but the formal evening was just about to start!

Each year we look forward to supping our glasses of bubbles *alfresco* in the beautiful Queen Anne Gardens but each year bar 1999 the weather has disappointed. Nevertheless the mood remained buoyant as we toured through the Castle on our way to Dinner. The meal was superb and was followed into the wee small hours by enthusiastic dancing.

The next morning got off to a gentle start and did not appear like the *Marie Celeste*, which has happened in previous years. Holding the meeting a mere 4 yards from the overnight accommodation was obviously a success!

Friday's first session was on head injuries. Drs. Barker & Macmillan from Dundee debated their very different ideas about how to manage these patients. Carol has spent a lot of time at the Western ICU in Edinburgh who have a fairly aggressive strategy for head injures, while Ken has spent time in Sweden becoming familiar with the Lund head injury protocol. This was an informative session and concluded with an appeal to have a randomised controlled trial of the two methods.

Dr Stuart McLellan then delivered his prize-winning paper on the validation of the PiCCO pulse contour analysis machine. This is able to measure cardiac output via the trace of the arterial wave form.

The day ended on a real high, (absolutely nothing to do with the night before!) with Vetinerary Anaesthesia Professor Jackie Reid, who held her audience spellbound for a good hour describing anaesthetising large animals. We were treated to a video on the use of *Immobilon*, that drug we all know about from our 2nd. Part days! When asked who were the worst owners to deal with Professor Reid admitted it was horse owners; and she did know someone who had intubated a giraffe!

Dr Alex Patrick then closed the meeting. Although numbers attending were lower than hoped for, we received very positive feedback about the quality.

GAT is coming to Scotland in 2001

St. Andrews to be precise. Dates for you diaries!
Wednesday 13th. until Friday 15th of June
We hope to see you there!

LINDSAY

KEN BARKER & CAROL MACMILLAN

JACKIE REID

GEORGE KENNEDY, LIZ McGRADY & THE PRESIDENT

DELEGATES GET DOWN TO SOME SERIOUS DANCING AT THE CASTLE

James Crawford
(1914-98)

Hugh Wishart
(1921-99)

AN APPRECIATION

by **Alastair Spence**

Most departments of anaesthesia with a major responsibility for training can fulfil that only if within the consultant ranks there are some who through professional excellence or leadership, strength of personality or charisma, but often a mix of all of these, influence the next generation in a manner that remains with them throughout their careers. The Western Infirmary of Glasgow has long been, and I know still is, blessed with such people. Two notable figures who had a significant influence on me and many of my contemporaries were Jim Crawford and Hugh Wishart. They were very different personalities, but complemented each other in a way, probably spontaneous, which added greatly to the quality of the department and the hospital they served.

Jim Crawford was born at Greenock, and qualified in medicine at Glasgow. His early appointments were to Glasgow, Reading & Huddersfield. He passed the examinations for the D.A. in 1939, and had enlisted with the Royal Air Force shortly before the outbreak of hostilities in the same year. After the war he was first at Ballochmyle Hospital, then became a consultant at Hexham, before his final posting to the Western Infirmary.

Hugh Wishart was a Glaswegian, educated at Hillhead High School and graduating from Glasgow in 1944. He was very proud of having been house physician to Sir John McNee, and a house surgeon at the Robert Jones & Agnes Hunt Hospital at Oswestry (at a time when it was developing to international celebrity). After National Service in the Navy (RNVR), he trained in anaesthesia in the Western & Victoria Infirmaries, and at Stobhill, becoming a consultant to the Western in 1954.

At the Western, Dr H.H. (Tony) Pinkerton had been appointed to head the Department of Anaesthetics after a significant, but not untypical, struggle to have the department recognised as an entity at all. In time, Jim Crawford became his deputy, or sub-chief. Tony Pinkerton was an enlightened autocrat; he was fully aware of the roles that Jim and Hugh were contributing to the department, and held both of them in high regard. When Dr Pinkerton retired, in 1966, Jim was his successor. There was no designated deputy, but Hugh filled that role de facto.

Very much in the Pinkerton tradition, both men were recognised experts in their craft, setting a standard for all in the care of their patients, punctuality, and orderly theatre arrangements. They were keen exponents of what is now called evidence-based medicine, although that is not a term that either would have recognised, and I doubt if they would have approved of it. Both men had a keen appreciation of a competent surgeon. and a ready willingness to convey to those who were less competent appropriate body language to ensure that the hapless colleague was left in no doubt as to where he stood.

When the University of Glasgow established an academic department, in 1967, Jim and Hugh were strong supporters of the development, although they enjoyed puncturing any academic posturing, as they perceived it (often correctly).

Jim's period as chief, through no fault of his, was rarely stable. The shambolic redevelopment of the hospital, first on site, and then (as a cover-up for maladministration at a high level) on two sites to include Gartnavel General Hospital, made management of anaesthetic services more difficult than could ever have been anticipated in earlier years. To this was added the increasing need for specialisation within anaesthesia, for example intensive care & obstetrics. Inevitably, these brought demands for an increase in staff numbers at a time when recruitment throughout the U.K was extremely difficult. In spite of all these difficulties the Department grew from strength to strength under Jim's leadership.

But the final change of these times was the most radical of all, - the "Cogwheel" proposals and the Brotherstone plan for the Scottish NHS spelled the end of the clinical chiefs in favour of specialty Divisions. Jim accepted these changes philosophically, although they were not entirely to his taste. Appropriately he was elected as first Chairman of the Division and steered these changes with skill. He was succeeded by Hugh.

In their clinical practice Jim and Hugh worked in synchrony. Their sessions in gynaecology & thoracic surgery were particularly notable. Long before the Western had an intensive care unit, they played the key role in the management of the late Kenneth Fraser's operations of thymectomy for patients with myasthenia gravis. They enjoyed a high success rate. By 1972 there had been 41 operations with only one perioperative death, a tribute to their personal dedication, admirably supported by first class nursing staff. Jim presented an account of this work to the Annual Meeting of The Association of Anaesthetists, at Birmingham in 1971, and was received with acclaim. Thymectomy was the focus of his presidential address to the Scottish Society in 1972.

Within the Western, in the 1960s, there were three or four consultants who were unconvinced by the attacks on chloroform which had caused its virtual demise. Jim and Hugh, with the help of E.B. Hendry, the hospital's biochemist, monitored clinical & biochemical outcome in a large series of patients, from which they concluded the continued use of the drug was justified in terms of the quality of anaesthesia achieved, and apparently safe; in all their cases they used a Chlorotec vapouriser. In parallel, Hugh obtained laboratory facilities from his friends in the Department of Pathology and produced a large series of e.c.g. traces in mice from which he concluded that, at least in his experimental model, chloroforrn was safer than most practitioners believed from the work of Goodman Levy (1911).

Hugh had other investigative interests of which he was the undisputed instigator. He involved younger colleagues as co-workers, several of whom now occupy senior academic appointments in the UK. High spinal block for large bowel surgery has not stood the test of time, although less extensive blocks are almost standard practice for such operations in many hospitals. Both that subject and the use of spinal block in hip surgery were the stimulus for two MD theses by members of the department. Spinal block for the control of blood loss in gynaecology, and its effect on arterial oxygenation, was the basis of his Presidential Address to the Glasgow & West of Scotland Society. Perhaps most significant was his tireless advocacy of low fresh gas flows to the circle breathing system, now in one form or other standard practice in Britain. This formed his presidential address to the Scottish Society in 1984, when low flow systems were still unfashionable.

Jim and Hugh were personable and hospitable men. They enjoyed interests outside medicine: golf, rugby and gardening in Jim's case. Hugh enjoyed the countryside, cars & driving (previously known as motoring) and jazz. Each achieved peer recognition through presidencies of the regional and of our national societies. Jim served on the Council of the Association of Anaesthetists (1967-70).

Jim is survived by Joyce and their five daughters. He was unconvincing in feigning oppression by the female preponderance at home. He did, however, own a robust male Airedale which took him for fast walks through Bearsden.

Hugh, who retired to Gatehouse-of-Fleet, had two sons by his first marriage, the younger of whom is a Consultant Ophthalmologist at Liverpool, and two daughters by his marriage to Trudi. Both girls are in graduate nurse training programmes.

A HISTORY OF ANAESTHESIA

seen through Postage Stamps

Alistair McKenzie *Edinburgh Royal Infirmary*

In 1992, I attended the 3rd. International Symposium on the History of Anaesthesia held in Atlanta, marking the sesquicentenary of the first use of diethyl ether for surgical anaesthesia by Crawford W. Long. At the Symposium a poster exhibit of the "history of anaesthesia" in philately captured my imagination and I developed the idea of doing my own comprehensive history of anaesthesia using postage stamps as the illustrations. Many stamps feature beautifully-designed & well-researched pictures, and all are free of copyright!

I have to say that this work required a great deal of research & many years' searching for the stamps, which I purchased from sources all over the world. I always strove for accuracy of information and referenced the text extensively to prove it. Many interesting curios cropped up.

For example, did you know that:

- the word "rubber" was coined by Joseph Priestley, because it could rub out pencil marks;
- a classification of depth of ether anaesthesia was published in Austria early in1847, before that of John Snow;
- the first volunteer-patient to receive cyclopropane was none other than Dr. Frederick Banting (of insulin fame).

The book covers the development of anaesthesia, resuscitation & pain relief from antiquity to the present, as well as relevant contributions of science & technology. More than a dozen Scottish physicians & scientists are mentioned.

The final chapter covers the emblems of the earliest official organisations of anaesthetists, which may be used on postal stationery & franked mail. Of course this includes the crest of the Scottish Society of Anaesthetists, which was founded in Edinburgh on 20th February 1914. The crest was designed jointly by the Society & the Gillies family in 1978, primarily for incorporation in a Caithness glass bowl, for presentation annually to the John Gillies Memorial Lecturer. The crest comprises a central thistle with an opium poppy on the left and belladonna to the right.

A HISTORY of ANAESTHESIA through POSTAGE STAMPS by Alistair McKenzie is published by Maclean Dubois at £9.99

clinical standards board for scotland

what does it mean for us?

david steel

principal officer

Over recent months a growing number of NHS staff have become aware of the Clinical Standards Board for Scotland.

They may have seen & commented on some of its draft standards; they may have attended one of the roadshows the Board has organised across Scotland; and they may have been invited to join the pool of reviewers the Board has been assembling.

Over the winter, they will be joined by many more as the Board's review teams visit each Trust & Island Health Board in connection with its initial portfolio of reviews; and the Board's profile in the NHS & among the general public will rise as it starts to publish reports.

What is this new organisation? What has it been doing over the last 18 months and what are its plans for the future?

Background

The Board was established as a special Health Board in April 1999. Its origins lie in chapter 8 of the report of the Acute Services Review published in June 1998, which recommended the development of a national system of quality assurance & accreditation of clinical services.

The Board's role, working in partnership with healthcare professionals & members of the public, is to agree national standards for clinical services and then to assess performance throughout the NHS against the standards.

Its aims are to encourage improvements in the quality of care & treatment, and to promote public confidence that, within the resources available, the NHS is delivering the highest possible standards of care.

Methodology

The Board's approach is set out in its Quality Assurance and Accreditation Manual issued in August 2000 following extensive consultation and piloting.

The Board will develop an annual programme of services to be reviewed.

For each service, it appoints a multi-disciplinary project group including healthcare professionals and members of the public. These groups oversee the three parts of the accreditation process:

- setting standards
- undertaking external peer review of performance against the standards;
- reporting & publishing findings.

In addition there is a fourth element that is crucial to the system: self-assessment of performance locally in relation to the standards.

This enables the clinicians & managers involved in the service under review to assess & develop their own practice and systems, and helps to ensure that the Board's external reviews are part of an ongoing process of continuing quality improvement.

The distinctive features of the standards that the Board is developing are that they are:

- **clinical standards** that focus explicitly on the care & treatment provided by healthcare professionals but take account also of non-clinical factors that have an impact on the quality of care
- **evidence-based** whilst recognising levels & types of evidence vary and the quality of supporting evidence does not necessarily correlate with the impact of a standard upon outcomes
- **results-oriented** in terms of improved patient outcomes whilst recognising many will relate to process and some to structure provided that they can be linked through evidence to outcomes
- **patient-focused** following (as far as possible) the journey of care or experience of patients as they go through the health- care system.

These criteria have three key implications for the Board.

First, its task can only be fulfilled with the active involvement of healthcare professionals who have expertise in and experience of the service under review.

Second, patient & public involvement is integral to everything that the Board is seeking to do. 50% of the Board's members come from outwith the NHS and there are lay people on each of its project groups developing standards & on each team undertaking peer reviews.

An important dimension of the reviews will also be to find out what steps Trusts are taking to involve patients in decisions about their own care and to obtain feedback from patients and to act upon the results.

Third, both its standards and its reviews need to include all parts of the NHS, and to focus on the links between them.

Primary care poses particular challenges for a service-based approach. For this reason primary care professionals are included on all of the Board's project groups; and a primary care reference group has been established to provide advice to the Board.

In addition, the Board has lent its support to the roll out of practice accreditation across Scotland, and is working with the Royal College of General Practitioners & others to develop a version of practice accreditation with a stronger clinical & patient focus.

Progress

Initially the Board was asked to focus its attention on the clinical priorities of cancer, coronary heart disease/stroke, and mental health.

After consultation, it established groups to develop standards for: breast cancer, colorectal cancer, lung cancer, ovarian cancer, palliative cancer care, secondary prevention following myocardial infarction and schizophrenia.

For each of these projects, draft standards were issued for consultation in Spring 2000.

As part of the consultation process, pilot peer review visits were held for each set of standards in two or three Trusts.

To complement these condition-specific standards, the Board has also developed some generic standards, designed to assist individual project groups by avoiding the need for repetition, and to support Trusts by identifying key issues they should be addressing in taking forward clinical governance.

These standards, which were issued for consultation in May 2000 and piloted in four Trusts during the summer, have been grouped under two broad headings:

- **patient focus** designed to ensure that "all services respond to patient's needs and preferences, and that patients are involved in decisions about their own care through effective two-way information sharing";
- **safe and effective clinical care** designed to ensure that "all patients receive safe and effective care and treatment based on available evidence".

Both the condition-specific and generic standards have been revised in the light of comments received and the experience of piloting them, and will be published over the next couple of months. The Board will then embark upon a programme of external peer review visits across Scotland designed to assess performance against the standards through a combination of objective evidence, in which each Trust's self-assessment data will be a vital component, and through observation & dialogue during a visit by a multi-disciplinary team including lay people.

At the conclusion of the process, the Board will publish a report comprising a national overview and individual annexes reporting on performance in each Trust.

The Board's reports must be objective in assessing performance & sufficiently robust to withstand scrutiny but at the same time they must be written to support & encourage staff in improving standards and to promote public confidence rather than public alarm.

Future

In this respect, as in others, the Board is under no illusions about the scale of the task it is undertaking. It is seeking to break new ground, but in doing so, it has three significant advantages:

- first, it is building upon solid foundations laid by organisations such as the Clinical Resource and Audit Group (CRAG), and the Scottish Intercollegiate Guidelines Network (SIGN);
- second, its role is complemented by the new statutory duty of clinical governance that has been imposed upon the board of each NHS body in Scotland; and
- third, it is able to harness the energy and commitment of the extended NHS family in Scotland.

The Board intends to apply the same scrutiny to its own processes that it will be expecting of others. Once the initial "pilots" are completed, as well as embarking upon a further portfolio of reviews, there will need to be wide discussion to evaluate the Board's approach.

One issue that has been raised already concerns the breadth of its reviews. The initial projects have looked at services provided for people with a particular diagnosis.

This has the benefit of immediate relevance to patients but, it is argued, runs the risk of distorting priorities and of breaking down what are essentially related activities.

For this reason, it may well be sensible to look at specialties as a whole.

The field of anaesthetics provides a very good illustration of the pros & cons of the two approaches.

Should the Board look at specific issues such as the management of pain or at anaesthetics as a single entity?

This is an issue on which discussions have already started with representatives of the College, and views would be most welcome.

Your Editor found this little cherub outside the front door at Peebles and saw a certain resemblence to our Past President from Dundee possibly holding up the onerous weight of Scottish anaesthesia?

Awa wi the Ba'Heids o' Bonnie Dundee

A SONG FOR A RETIRING C.D.

grant hutchison *ninewells hospital*

Tae the lairds o' the Trust Board t'was Iain Gray spoke
Sayin': dinna blame us noo that a'body's broke
We're no wastin' time, or Trust money, or beds -
It's a' these sick patients has turned yer books red.

Chorus: Come gie us th' equipment and gie us some staff
(An' maybe a wee bit o' time-and-a-half)
Just turn up the O2 an'let us breathe free
An' hands aff the gasmen o' Bonnie Dundee!

When it cam' the the boardroom ye couldnae whack Iain
He'd keep on advancin' while others wiz fleein'
He'd tell 'em it straight and then put in his welly
An' a' the time grinnin' like Machiavelli.

Chorus: For he'd a' the right figures an' a' the right gen
An' graphs tae dumbfooner the management men
So turn up that O2 an' let us breathe free
An' hands off the Gasmen o' Bonnie Dundee!

But up and quoth Iain: Ah'm tired o' their squeakin'
(An' sick untae death o' that wee besom Deacon)
Ah've carried the torch an' Ah've fought the good fight
Noo some other body can deal with this nonsense.

Chorus: So it's oot wie the goff-clubs an' aff doon the course
Or awa' tae the Choral tae sing hisself hoarse
An' we're raisin' oor glasses an' cheerin' times three
Cryin': Here's tae the health o' oor finest CD!

ANAESTHETIC DOME FOR THE NEW AGE

A COLLABORATIVE EFFORT COORDINATED BY THE EDITOR

We have heard that the College and Association have outgrown their London HQs, intimating they are looking for spacious new accommodation. Meanwhile the Millennium Dome actively seeks a buyer. This leaked plan for a modern day Anaesthesia Dome brings them together with (apparently) a great deal of Scottish creative input . . . . .

HISTORY ZONE

A glorious exposition of our colourful past, set in a series of period tableaux furnished by a hospital near you. Here a dazzling medley of colourful patients will be played by Stanley Baxter, Rikki Fulton & Rab C. Nesbitt.

It has proved difficult casting Horace Wells, as chairside dental anaesthetists are proving to be something of a dying breed. Ian Smith, man of a million Grampian extractions, may be persuaded to do it. The somewhat-ethereal roles of William Morton & the frequently-stoned chloroform king James Y. Simpson will naturally be offered to a pair of Edinburgh anaesthetists. Crawford Long, that tall, distinguished & innovative physician, will be handled with not too much difficulty by Crawford Reid. Finally, the historic portrayal of the "Father of Scottish Anaesthesia", the man who brought back that first news of the great discovery from the New World to the Old - one A.A. Spence - will naturally be played by Himself.

THE BODY ZONE

Honey I've Shrunk the Surgeon - the stuff of dreams! A giant blow-up patient will facilitate keyhole surgery for all. E.N.T. specialists go pot-holing for pleasure, colorectal surgeons look up old friends while gynaecologists get lost in the bush. This Flintstone village is a repository for slow surgeons - a big commodious space stocked with irony, sarcasm & unfailing patronising charm in the distribution of private practice titbits. Friday afternoons are BSE (basic surgical expertise) free - SHOs operate while the boss is offski to that plush upmarket facility in a better neighbourhood not far from you.

THE QUIET RELAXATION ZONE

On the upper level sit wine-quaffing executives & suave London anaesthetists, discussing the futures market, the Proms and progress in the Lords Test Match. Down below in the basement, we find a bevvy of thirsty Glasgow gaspassers, selflessly swilling Scottish soporifics, singing tribal songs and swapping hard luck stories about golf & the latest Old Firm game.

REACCREDITATION & LEGAL ZONE

A deep pit is proposed for fallen colleagues who flunk the MCQ, OSCE or kill the simulator mannequin. All appraisal will be accompanied by music chosen from the BBC's *Songs of Appraisal*. Laser stun-guns & paint balls will follow failure while successful reaccreditation will be acknowledged with house champagne & an extremely expensive certificate.

This zone will also contain a clinical minefield, in line with future expectation of a harsher litigious climate. Here some smart, knotty legal-beagle is going to get an aching head recounting all our disasters in the courtrooms of the land. "A sad, sorry tale of incontrovertible incompetence, m'lud. Red card, please!"

CLINICAL or WORK ZONES

General Anaesthesia Zones

There will be several of these. First explore the Milky Way, a total intravenous zone, where budgets rise & some extraneous movement is to be expected. Then move through to the Smelly Stuff Zone for a range of perfumed anaesthetics, allegedly more economical but some are accompanied by coughing. Lastly, fight your line manager to enter the Ultima Experience, where remifentanyl is freely available, but don't hold your breath!

Intensive Therapy Zone

A lottery zone, where admission criteria exclude all but the fittest. You'll behold gran-turismo ventilators, state-of-the-art monitors and a big bank of syringe drivers dispensing embalming fluids & instant relaxation.

Maternity Zone

Interventionists in the ascendancy. Deep shag carpet & the ever present strains of Mendelssohn. Here mums call bouncing babes after their obstetricians, but dads thankfully hand you big Cuban cigars during successful sections. But it regularly all goes pear-shaped at 4 o'clock in the morning!

Pain Clinic Zone

A groovy ganglionic encounter, where you'll experience dorsal horn. A pre-emptive if not pre-eminent party. Some things never change, so you'll get your fill of everybody else's problem patients. Heroes all.

Regional or ESRA Zone

Every Stimulus Reachable Always- this is where you can block it all out. Watch Wildsmith & Wilder-Smith, in fact observe a whole herd of wildebeasts galloping across the Plain Marcain. In this dream world, all epidurals will be easy and all spinals will have backs like Naomi Campbell.

RETIRED PERSONS ZONE (also known as The Peebles Zone)

Watch distinguished gentlemen perambulating around in a carefree manner, some showing uncommon interest in new-fangled ventilators which their wives have mistaken for the latest automatic washing machines.
Observe how they pause to swap stories with old chums & fellow collectors out on their annual biro-replacement safaris. Watch them scavenging satchelfuls of freebies (huggy koalas, diddy-men & those attractively-celloed Sevoflurane notepads which are recycled later for the local musical society).

MANAGEMENT ZONE (once the Mind Zone, now a true vacuum Ozone)

Located up on the plush penthouse floor of a financially-strapped hospital near you, with a bank of win-win fruit machines in its brightly lit concourse. In this brave new world, old options are revisited & meaningful decisions come regularly, as they're now accompanied by massive managerial orgasms. On the tannoy *"Rockin' all over the World"* is sung in middle-of-the-road, musak fashion by the Mike Sammes Singers, since (as we all know) the Status Quo is not an option.

It should be noted that the whole shebang was set up by the Past President of the College in meaningful discussion with the incoming President of the Association. His easiest decision was that Tony & Cherie should be invited to perform the opening ceremony, since they had named their new baby after him!

A *Big Brother* Zone

The "diary room", where each week an over-arching council meets to vote out some well-adjusted friendly person & take in some obnoxious git. Also called an appointment committee, at a rival hospital near you. You are the weakest link, Goodbye!

Future Zone

Here we dreamcast ourselves to a future of hyper-reality, to observe the management's plan for a world with no surgeons (**real** robots now!), no anaesthetists (we've closed the loop & now work from home or the links), a Nintendo NHS in which nurses are just *Playstation* people and (coming soon) the manager's ultimate dream state - a hospital with NO PATIENTS. Just think, meetings all the time, a balanced budget & no bolshie medics . . . . *bliss!*

WHO PAYS FOR IT?

It all sounds awfully expensive, therefore the vexed question of funding must be decided by a Parliament whose members quickly set about galbraithing the problem - i.e. finding the fall-guy. Afterwards they would adjourn to *Broadie Deacon's* to enjoy the nation's favourite culinary treat - Smoked Salmond wi' a dash of McCletchie, washed down with a large Dewars. That was in the good old days, in the beginning. Now they'll have to make do with Swinney sandwiches an' a pint of McLeish.

Certain rules of thumb, sorry demographics, will divide the population into two groups - the Arbuths & the Arbuthnotts - to see who gets all that tax cash raised from fags & booze consumed in a deprived area near you. Rollover jackpot money will eventually be forthcoming since, as we know, health care is always a lottery . . . .

NEIL MACKENZIE REPORTS ON

Peebles 2000

Members & guests gathered for the traditional Society Spring weekend at Peebles Hydro. Although the venue & format were unchanged from previous years, the combination of an earlier date & late Easter prevented several Society stalwarts from attending, leading to a slight down-turn in numbers. This did not, however, affect the enjoyment of those present.

We were fortunate with the weather and the usual sporting activities took place on the Friday afternoon. The fishermen had a successful time at Portmore, all catching at least one trout, with the prize going to Donald Miller. There was a good turnout for the golf and a piece of history was made with our guest lecturer Mal Morgan winning the competition. Mal has not yet committed himself to defending the trophy, but I am sure his efforts will spur local members to try harder next year!

The outgoing President Iain Gray chaired a lively AGM on the Saturday morning, with a great deal of constructive discussion on medico-political matters and the role of the Society. It is worth remembering that this is the only forum for all Scottish anaesthetists to discuss matters of common interest with their elected representatives from the College and Association. The Treasurer reassured Members that the Society's finances remained inherently sound, although some concern was expressed over future viability of our meetings programme in its current format. The full minutes will be circulated separately to Members.

After lunch, Registrars' Prize winner Stuart McLellan from Edinburgh presented a synopsis of his paper on continuous cardiac output estimation by pulse contour analysis and received his prize from Bob Gray of Ohmeda. Ken Barker (Dundee) received second prize for his paper on smoking & anaesthesia. The newly-installed President Douglas Arthur then delivered his Presidential Address on the theme of out-patient paediatric anaesthesia, drawing on his many years of professional experience in the field.

The afternoon was rounded off by an outstanding guest lecture from Mal Morgan, President of the Association of Anaesthetists, who managed to entertain & stimulate the audience while slaughtering a few sacred cows. Mal's dry summary of his paper doesn't really do justice to his entertaining delivery - a real *tour de force* for what transpired to be his last lecture before retiring.

A busy social programme occupied guests & their children throughout the day, highlights including aromatherapy and archery, while the Hotel's excellent sporting facilities were well used.

As always, the meeting culminatedted with the Annual Dinner & Ball. Members, guests & colleagues from the Trade ate, drank & danced into the early hours and an enjoyable time was had by all. Where else can one mix so easily with Presidents of the College, Association, RCA Scottish Board and the APA? Some of the more sober moments were caught on camera by Wagih Antonios from Fort William, relishing his role as a Society photographer.

The weekend ended in its usual low-key fashion on Sunday, with members departing in various stages of recovery over the course of the morning, all determined to reconvene next year when the Meeting returns to its traditional weekend of 22nd - 24th April 2001.

STRICTLY
NO KARAOKE!

IAIN GRAY
OPENS
THE TRADE
EXHIBITION

NEW VOLATILES?

OUR LADIES
LEARN THE
SECRETS OF
AROMATHERAPY

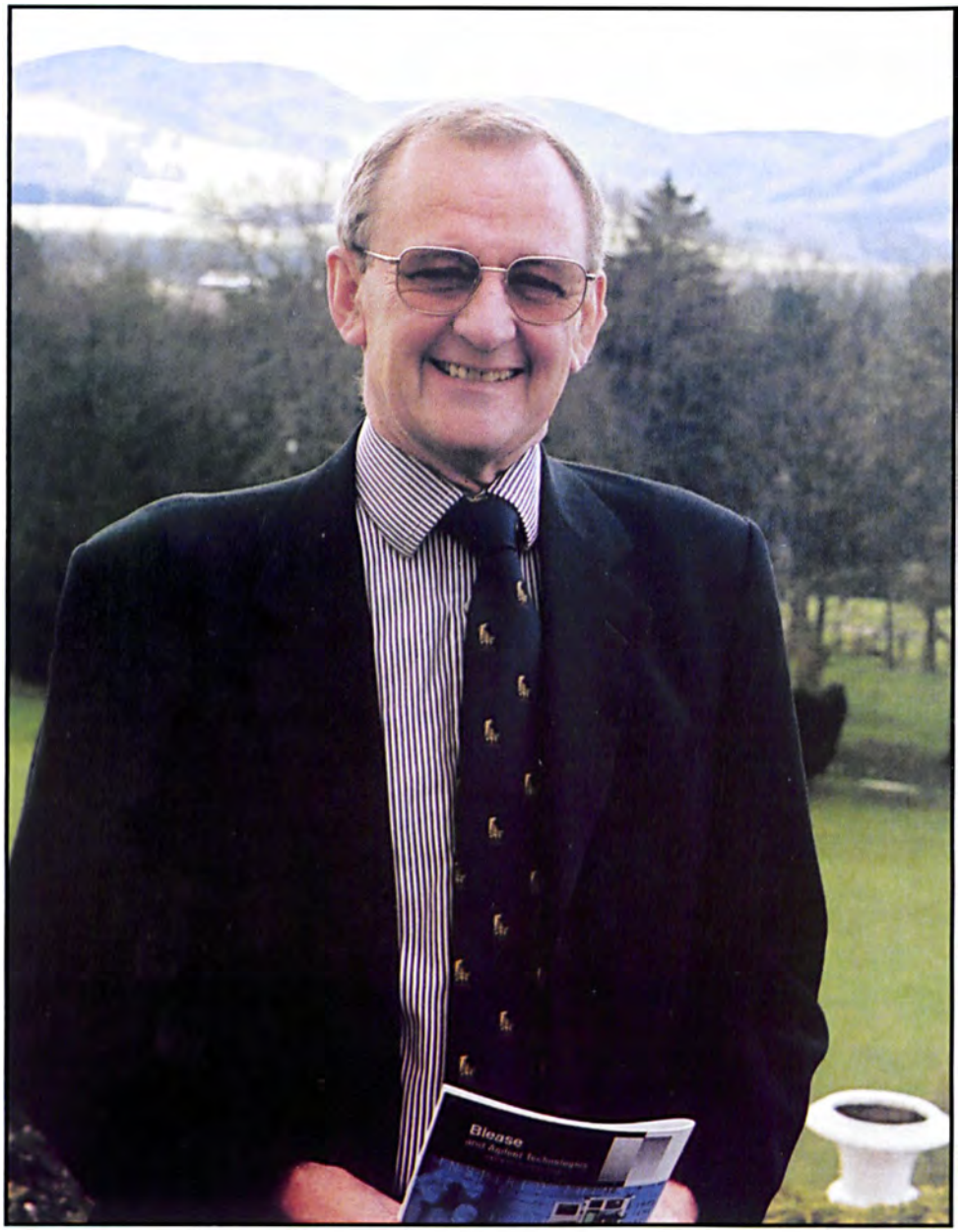
BULLSEYE!

TARGET
PRACTICE
FOR SOME
KEEN KIDS

peebles pics BY WA

BY WAGIH ANTONIOS

peebles pics BY WAGIH ANTONIOS



MAL MORGAN

PRESIDENT OF THE ASSOCIATION OF ANAESTHETISTS
WHO PROVED TO BE AN ACE GOLFER & DISCERNING ANNALS READER

sacred cows

Guest Lecturer **Mal Morgan**

President of the Association of Anaesthetists

Anaesthetists are a great bunch of people and anaesthesia the most interesting & versatile of all the specialties. But like everyone else, we have certain fixations which we tend to hold sacred, when the evidence supporting them is flimsy indeed. What follows just highlights some of these.

A statement from the Confidential Enquiry into Maternal Deaths 1961-63 reads: "Anaesthesia initially appeared satisfactory, but respiratory difficulties occurred before the operation was completed. By this time the anaesthetist was busy elsewhere and not immediately available."

Another comment comes from the 1967-69 report "In the five other cases, two patients were found to be dead on transfer from the operating table to the trolley."

Yet obstetric anaesthetists believe that the main reason for the reduction in maternal deaths since then has been the marked increase in regional anaesthesia. Couldn't the fact that anaesthetists don't wander off during an operation and would notice any adverse events play a part?

Every anaesthetist knows of Mendelson's syndrome and of the work that he did implicating gastric acid in the development of serious lung injury. Yet this condition was described some 6 years earlier by Hall [1] and although Hall did no experimental work, he did state that the chemical pneumonitis that developed was "....set up by certain fractions in the gastric juice itself...."

It was over 20 years before we took up Mendelson's suggestion of alkalinising gastric contents. This is still done routinely for the majority of women in labour. But there is no evidence that any of those who died of "acid aspiration" actually did so as the pH of the inhaled maternal was never measured. It has been pointed out that we are treating about 700,000 women per year in the hope of preventing a condition that they are not even at risk of developing as they are not going to have a general anaesthetic.

We have also not been sensible in our approach to the "critical volume" of gastric juice that must be inhaled to produce significant lung damage. The volume of 0.4ml.kg^{-1} or 25ml in the average woman at term, came from one experiment in one Rhesus monkey [2]. Further, but rarely quoted work in a series of animals, has shown the volume to be at least twice this [3].

Preloading the circulation has long been regarded as a pre-requisite before Caesarean section under regional anaesthesia, despite the wealth of evidence that it is largely ineffective. Jackson et al [4] have shown there is no difference in the use of ephedrine whether preloading is used or not. Ephedrine is also regarded as the vasopressor of choice as it does not cause a reduction in uterine blood flow [5]. However, these workers and others [6] have not shown any fetal compromise when agents such as methoxamine or phenylephrine are used to restore maternal blood pressure.

The first use of continuous caudal analgesia to relieve the pain of labour is usually attributed to Hingson & Edwards in 1942. Yet it was a Rumanian, Eugen Bogdan Aburel, working in Paris, who described this technique in 1931 [7] and also continuous lumbar epidural analgesia in 1938. It is wrong of us to assume that if it wasn't written in English then it hasn't been done. The fact that Aburel spent most of his life behind the Iron Curtain was unfortunate, in that it didn't allow him to communicate his work to the free world.

The introduction of curare to anaesthesia is usually attributed to the Canadians Griffith & Johnson. However, in 1928, Francis Percival de Caux [8] used a watery extract of the drug during anaesthesia for surgery, but gave it up because there was no method of standardising it. He failed to persuade drug firms, including Hoffman la Roche, to take this up. Unfortunately, de Caux was struck off the medical register for procuring abortions!

Nowadays, intensive care units are frightening places for those of us "jobbing" anaesthetists and this is certainly true of the typical modern ICU ventilators with an apparently infinite number of patterns of ventilation. Yet there has been no controlled trial to show that these modern forms of ventilation are better than that produced by a standard "bag squeezer". Indeed, Estaban et al [9] in a randomised trial of weaning from ventilator support concluded that "A once daily trial of spontaneous breathing led to extubation three times more quickly than IMV and about twice as quickly as pressure support!"

The problem of operating theatre pollution is another area where anaesthetists have not acted in an entirely sensible fashion. Alleged problems include endangering lives, causing cancer, deformed babies and an increased rate of miscarriages. Safe levels have been defined for all inhalational agents, with the exception of sevoflurane & desflurane and these levels have to be measured from time-to-time. This has led to the introduction of scavenging despite there being no demonstrated toxicity, no benefit to personnel or patients, but which itself has documented hazards. One must agree with Keats [10], who stated "One has to wonder why we behave in this way. Why is it we cannot wait for reasonable answers, before we go off half-cocked, full steam ahead to fight dragons and problems not known to exist".

We also behave in an extraordinary way when it comes to writing papers. We seem to believe the English language changes when we put things down in print instead of keeping it as simple as possible. There is a cult these days for using abbreviations for virtually everything, which only achieves to reduce a paper to unintelligible gibberish. The first thing any editor sees of a paper is the title, so why not make it interesting so that it catches the potential reader's eye. A title like "Morphine premedication increases post-operative vomiting" is dull, uninteresting and unlikely to be read.

Never use statements as titles, nor questions. Examples of titles that interest a reader are "The mismanagement of suxamethonium apnoea" (Vickers) and three by probably the greatest of medical writers, Richard Asher "On the dangers of going to bed", "Myxoedematous madness" and "A woman with the stiff man syndrome". All these attract a reader.

Accuracy of references is another major problem. Any reference you quote, you should have read. Copying references from other people's papers should never happen, as this is the way in which errors occur, which are then perpetuated.

The most famous of these is Dr O. Uplavici [11], who was supposed to have written a seminal paper on amoebic dysentery in the 19th. century. The situation was eventually clarified by Dr C. Dobell, who write an "obituary" for O. Uplavici after having found, with considerable difficulty, the original paper, the journal having been discontinued. O Uplacivici was not the author of the paper, but the title, and those of you versed in Serbo-Croat will realise that it means "On Dysentery". Somebody even gave him a degree!!

There are many other things that we regard as "sacred" which would not stand up to scrutiny, but it is now up to someone else to take up the fight for evidence before things get entrenched in folklore.

REFERENCES

1. Hall CC. Aspiration pneumonitis. An obstetric hazard. *Journal of the American Medical Association* 1940; 114: 728-733

2. Roberts RB, Shirley MA. Antacid therapy in obstetrics. *Anesthesiology* 1980; 53: 83

3. Raidoo DM, Rocke DA, Brock-Utne JG, Marszalek A, Engelbrecht HE. Critical volume for pulmonary acid aspiration: reappraisal in a primate model. *British Journal of Anaesthesia* 1990;65: 248-250

4. Jackson R, Reid JA, Thorburn J. Volume preloading is not essential to prevent spinal-induced hypotension. *BJA* 1995; 75: 262-265

5. Ralston D, Shnider SM, deLorimer AA. Effects of equipotent ephedrine, metaraminol, mephentermine and methoxamine on uterine blood flow in the pregnant ewe. *Anesthesiology* 1974; 40: 354-370

6. Ramanatham S, Grant GJ. Vasopressor therapy for hypotension due to epidural anesthesia for cesarean section. *Acta Anaesthesiologica Scandinavica* 1988; 32 559-565

7. Curelaru I, Sandu L. Eugen Bogden Aburel (1899-1975). The pioneer of regional analgesia for pain relief in childbirth. *Anaesthesia* 1982; 37: 663-669

8. Wilkinson DJ. Dr F P de Caux - the first user of curare for anaesthesia in England. *Anaesthesia* 1991; 46: 49-51

9. Estaban A, Frutos F, Tobin MJ et al. A comparison of four methods of weaning patients from mechanical ventilation. *New England Journal of Medicine* 1995; 332: 345-350

10. Keats AS. Anesthesia mortality in perspective. *Anesthesia and Analgesia* 1990; 71: 113-119

11. Dobell C. Dr O Uplavici. *Parasitology* 1938; 30: 239-241

The Scottish Society is always keen to help members wishing to undertake good work abroad

Let us know if you have any plans, or would like to be considered as a candidate by the Society, if we were to be approached from abroad. Please contact your regional council member in the first instance.

trainees' prize

sponsored by datex ohmeda

COMPARISON OF CONTINUOUS CARDIAC OUTPUT ESTIMATIONS BY PULSE CONTOUR ANALYSIS WITH PULMONARY ARTERY THERMODILUTION IN CRITICALLY ILL PATIENTS

Stuart McLellan *SpR Edinburgh Royal*

Background

Cardiac output (CO) is one of the most important haemodynamic parameters in the assessment and treatment of critically ill patients.

The established clinical gold standard for the estimation of CO is the bolus pulmonary artery thermodilution technique (CO_{PA}), performed by intermittently injecting an ice-cold solution. The disadvantages of this technique are that it requires a pulmonary artery catheter, it may result in a significant fluid load but most importantly it is intermittent and therefore rapid changes in CO may remain undetected.

Semi-continuous devices based on a thermodilution technique have been a major advance. These utilise a modified P.A. catheter incorporating a heating filament to generate thermal pulses. A computer system estimates CO automatically with estimations updated approximately every 60 seconds and time averaged over several minutes. These automated devices produce a clinically acceptable level of accuracy. [1-3]

More recently, a less invasive continuous CO system based on pulse contour analysis has been developed. This concept of determines stroke volume from the area under the arterial pressure waveform. [4]

This method involves measuring the area under the systolic portion of the arterial pulse waveform from the end of diastole to the end of the ejection phase. Stroke volume is then calculated by dividing the arterial pulse waveform by the aortic impedance (Equation 1).

Since the actual aortic impedance of an individual is unknown a calibration procedure is necessary. Cardiac output determined by an independent method is used to calculate aortic impedance (Equation 2). The continuous pulse contour analysis CO system evaluated in this study is calibrated by the intermittent bolus femoral arterial thermodilution technique (CO_{PA}).

Equation 1 $SV_{PiCCO} = A_{sys} / Z_{ao}$

Equation 2 $Z_{ao} = HR * A_{sys} / CO_{PA}$

A_{sys}	arterial pulse waveform		
SV_{PiCCO}	Stroke volume (PiCCO)		
Z_{ao}	aortic impedance	HR	Heart rate

For this technique a specially developed thermistor tipped arterial catheter is sited in the femoral artery. A central venous catheter is required for the bolus injection of a thermal indicator. By continuously measuring the area under the arterial pressure waveform & dividing this area by the calculated Z_{ao}, stroke volume can be estimated on a beat-to-beat basis.

CO is displayed as a sliding average of the preceding 30s, and is updated continuously. The ability to perform in-vivo calibrations provides additional assurance on the accuracy of the continuous CO estimations & addresses concerns regarding previous pulse contour systems.

The development of a less invasive CO monitor would provide a useful alternative to the pulmonary artery catheter, for instance in the high dependency unit.

Aims

1) to evaluate the PiCCO monitor in critically ill patients who are cardiovascularly unstable.
2) to compare CO estimations by pulse contour analysis (PiCCO) with those obtained using intermittent & semi-continuous pulmonary artery thermodilution techniques

Materials and methods

Ethics committee approval was obtained. Informed consent was obtained from the patients' closest relatives.

Patients

Critically ill patients requiring pulmonary artery catheterisation were recruited to the study. Patients were excluded if informed consent was refused or if there were any contraindications to femoral artery catheterisation e.g. aortobifemoral graft.

Monitoring

Cardiac output estimations were recorded continuously during the period of pulmonary artery catheterisation.

P.A. catheters (SG CCO/Sv02 744H7.5F, Baxter Edwards Critical Care) were inserted for clinical management only by the standard clinical procedure. Catheter position was verified by continuous monitoring of the pulmonary artery pressure, central venous pressure, intermittent measurements of the pulmonary artery wedge pressure & by a portable chest radiograph.

The catheter was connected to a continuous CO monitor (Vigilance™, Baxter Edwards C.C), which displayed an updated CO reading every 30-120 seconds, recorded at one-minute intervals to a networked desktop computer (CarePlane system, Hewlett Packard) using specially developed software.

A 4F arterial thermodilution catheter (Pulsiocath PV2014L13, Pulsion Medical Systems, Munich) was inserted into the femoral artery using the Seldinger technique and connected to a continuous cardiac output monitor (PiCCO, Pulsion Medical Systems). Arterial pressure was continuously transduced via this catheter.

The monitor was calibrated using bolus thermodilution measurements detected by the thermistor. Continuous cardiac output estimations from the PiCCO monitor were recorded at one-minute intervals using a serial link to a laptop computer. The computer software required to perform this task was specifically developed by one of the investigators for the purpose of this study.

Using the same catheters & equipment it was possible to obtain intermittent bolus cardiac output measurements from the pulmonary & femoral arteries. One investigator performed five sequential bolus thermodilution determinations at random throughout the respiratory cycle. The injections were completed within a 5-minute period to minimise variation in actual cardiac output. Each bolus consisted of 10 mls of iced saline injected by hand through a closed injection system (CO Set, Baxter Healthcare) connected to the injectate port of the pulmonary artery catheter. The injectate temperature was measured at the external port.

Cardiac output was determined from the thermodilution curves detected by thermistors in the pulmonary & femoral arteries. The thermodilution curves were displayed by both monitors to allow detection of artifacts. Intermittent cardiac output determinations were performed at regular intervals throughout the study period.

The continuous thermodilution cardiac output value was defined as the mean of the five values before and dye after the sequence of bolus injections.

The continuous pulse contour cardiac output value was defined as the mean of five values before the sequence of bolus injections.

Statistics

Statistical advice was obtained. CO estimations have been compared by the Bland & Altman analysis. [5] One way analysis of variance was used to quantify the repeatability of the intermittent thermodilution CO estimations.

Results

20 patients were recruited to the study although data was unavailable on three patients:- in one patient the P.A. catheter malfunctioned, in a second the data retrieval system failed and in a third (with fulminant hepatic failure) the pulse contour analysis algorithm was unable to identify the arterial systolic waveform due to very low systemic vascular resistance (<400 dyn•sec cm^{-5}). The characteristics of the 17 study patients are shown in Table 1.

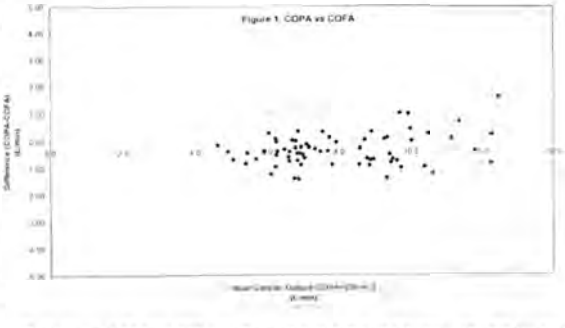
Table 1

Patient	Age	Sex	Diagnosis
1	18	F	Overdose (unidentified substance)
2	77	F	Peritonitis
3	68	F	Septic shock
4	76	F	Paracetamol overdose
5	72	F	Pneumonia
6	73	F	Pancreatitis
7	39	F	Orthotopic liver transplantation
8	51	M	Pancreatitis
9	24	F	Paracetamol overdose
10	60	F	Orthotopic liver transplantation
11	66	F	Congestive cardiac failure
12	57	M	Orthotopic liver transplantation
13	42	M	Pneumonia
14	76	M	Congestive cardiac failure
15	48	M	Orthotopic liver transplantation
16	79	M	Pneumonia
17	57	M	Orthotopic liver transplantation

Intermittent cardiac ouput

CO_{PA} vs. CO_{FA}

A total of 104 comparisons between CO_{PA} & CO_{FA} were obtained (Fig. 1)

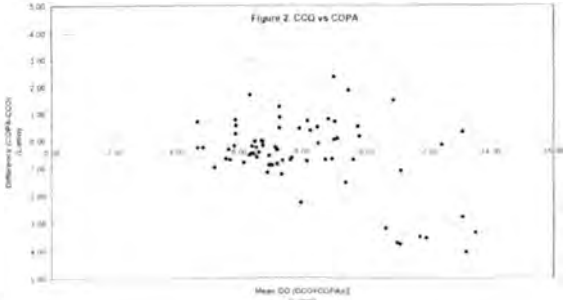


The bias was -0.37L/min (95% confidence interval -0.27 to -0.47L/min). The 95% levels of agreement were +0.75L/min & -1.49L/min (bias± 1.12L/min). Repeatability (within subjects coefficient of variation) for CO_{PA} and CO_{PA} was 8.4% and 6.4% respectively.

Continuous vs. intermittent cardiac output

CCO vs. CO_{PA}

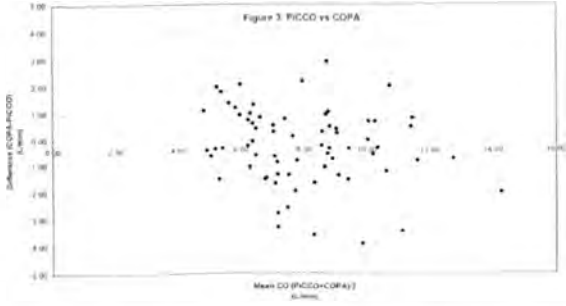
A total of 71 comparisons between CCO & COPA were obtained (Fig. 2).



The bias was -0.51L/min (95% confidence interval -0.19 to -0.83L/min). The 95% levels of agreement were +2.13L/min and -3.15L/min (bias±2.6L/min).

PiCCO vs. CO_{PA}

A total of 71 comparisons between PiCCO & COPA were obtained (Fig. 3)



The bias was -0.29L/min (95% confidence interval +0.05 to -0.63L/min). The 95% levels of agreement were +2.57L/min and -3.15L/min (bias± 2.86L/min).

Continuous cardiac output PiCCO vs. CCO

Continuous CO estimations were obtained at one-minute intervals by pulse contour analysis & P.A. thermodilution. Typical results are shown in the Appendix. Results of the analysis of agreement, assessed by bias & precision (95% limits of agreement) of the individual patients are shown in Table 2.

Table 2. Arranged in descending order from good to poor agreement.

Patient	Period of study(h)	CO range (L/min)	Bias (L/min)	95% limits of agrmt	95% limits of agrmt
13	29	6.3 - 9.4	0.77	±1.2	±13
14	17	5.4 - 7.2	-0.14	±0.8	±13
7	16	7- 10.2	-1.28	±1.4	±14
3	13	4.9 - 9.8	-0.42	±1.5	±15
15	6	9.3 - 11.7	-0.67	±1.6	±15
9	19	6.4 - 9.2	-1.8	±1.4	±17
12	11	6.8- 14.8	0.15	±2.6	±17
5	21	7.3 - 17	0.62	±3.6	±21
1	10	6.9- 10.6	0.56	±1.6	±22
2	23	5.4 - 8.7	0.26	±1.5	±22
10	11	5.6 - 13.2	-1.4	±2.0	±22
8	19	4.4- 10	-0.74	±1.9	±23
17	18	5.5 - 9.5	1.23	±1.7	±24
16	19	4.5 - 7.8	-0.59	±1.6	±28
11	16	3.4 - 7.7	-0.77	±1.7	±30
4	10	4.6 - 7.5	-0.68	±2.0	±31
6	24	4.6- 12.6	-0.92	±2.8	±34

Discussion

Intermittent CO estimation (CO_{PA} vs. CO_{FA})

This study has demonstrated very good agreement between intermittent CO estimation by femoral artery & pulmonary artery thermodilution. Femoral a. thermodilution overestimated CO with respect to P.A. thermodilution by a mean of 0.44L/min, this result is not clinically significant. These findings are consistent with previous studies. [6, 7]

The reasons for the slight overestimation of CO by femoral artery thermodilution are unclear. Possible explanations include loss of thermal indicator in transit from the pulmonary artery to the femoral artery, or alternatively the early recirculation of thermal indicator resulting in the broadened thermodilution curve seen in the aorta. It has also been suggested that this overestimation may be due to the observed transient reduction in heart rate that occurs following the cold injection. [8] This transient reduction in heart rate has less influence on femoral artery thermodilution due to the longer appearance time.

The femoral artery thermodilution technique also demonstrated very good repeatability (coefficient of variation of 6.4% vs. 8.4% for pulmonary artery thermodilution).

In conclusion, femoral artery thermodilution can be used to provide accurate, reproducible estimations of CO at the bedside.

Semi-continuous pulmonary artery CO estimation (CCO) vs. CO_{PA}

In this study the 95% limits of agreement between semi-continuous and intermittent CO estimation by pulmonary artery thermodilution were ±2.6 L/min (Fig 2). This level of agreement is relatively poor (Table 3).

Table 3

Reference	Subjects	Bias L/min	95% limits of agreement L/min	
2.	35 crit. ill pts.		0.03	± 1.04
3.	20 crit. ill pts.		-0.8	± 2.4
1.	18 swine	0.05	± 2.18	

The discrepancy between intermittent & semi-continuous P.A. CO estimations is particularly marked at high CO values, this has been noted previously. [9]

Excluding cardiac output values >10 L/min results in a bias & precision of -0.14 ± 1.6 L/min.

Continuous pulse contour CO estimations (PiCCO) vs. COPA.

The comparison of PiCCO with intermittent pulmonary artery CO estimations demonstrated an insignificant bias but poor precision (95% limits of agreement ±2.86 L/min). These results are in contradiction with those of other studies [10, 11] (Table 4).

Table 4

Reference	Subjects	Bias L/min	95% limits of agreement L/min
10.	12 cardiac pts.	0.003	± 1.26
11.	24 cardiac pts.	0.07	± 1.4

There are notable differences between the studies. This present study recruited critically ill patients with diverse presenting illnesses undergoing pulmonary artery catheterisation. Previous studies have tended to study single patient groups, for example, cardiac surgical patients. In addition, this study concentrated on patients receiving active resuscitation over several hours (range 6-29 hrs, median 17 hrs) whereas other studies have performed comparisons within a short time period or during an uneventful recovery phase. The other studies also contain few high CO estimations (>8 L/min). By contrast in this present study there is a significant proportion of high CO estimations. That could explain smaller biases & limits of agreement than in this study.

Continuous pulse contour CO estimations (PiCCO) vs. CCO.

This is the first study to compare serial CO estimations obtained by continuous/semicontinuous techniques over several hours. Results of the comparison of CO estimations by pulse contour analysis and semi-continuous pulmonary artery thermodilution are variable ranging from good agreement (patients 7, 13 & 14) to poor agreement (patients 4, 6 & 11). There are several possible reasons for poor agreement observed in some subjects.

The pulse contour algorithm is more susceptible to changes in heart rate & blood pressure than the pulmonary artery thermodilution technique (see Appendix, patients 8 & 3 resp.) Also, the CO displayed by the PiCCO monitor is time-averaged over a period of 30 seconds whereas the Vigilance™ monitor is time-averaged over several minutes. Subsequently, the PiCCO monitor has a significantly shorter response time than the Vigilance™ monitor (Appendix, patient 10). This in itself will result in discrepancies between the two devices.

Conclusions

Bolus femoral artery thermodilution is an accurate & reliable method for estimating cardiac output, albeit intermittently. The ability to monitor CO using an arterial line and a central venous catheter is an exciting new development that is readily applicable to the high dependency & intensive care settings.

This study found greater discrepancies between CO estimations by continuous & intermittent pulmonary artery thermodilution than previous studies. Discrepancies were particularly marked at CO values >10 L/min. These findings should be considered when initiating CO monitoring in patients with high CO states.

Continuous CO estimation by pulse contour analysis has shown a variable degree of accuracy & precision.

Discrepancies between pulse contour analysis & continuous Pulmonary Artery thermodilution were shown to occur with changes in heart rate and blood pressure. The difference between the monitors' response times was also shown to contribute to the observed discrepancies.

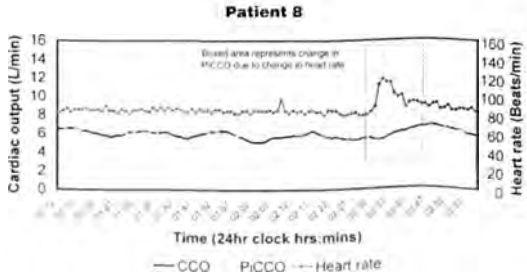
Funding

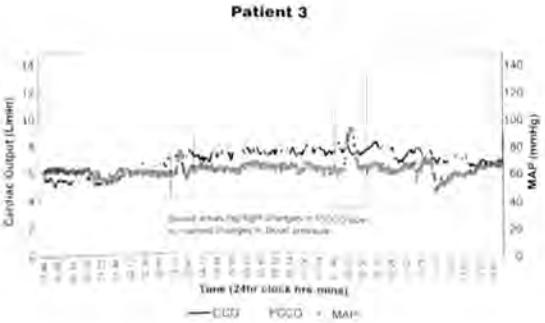
Endowment Fund, Royal Infirmary of Edinburgh and Tenovus Scotland.

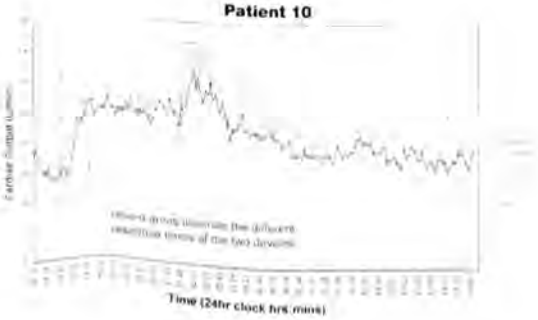
References

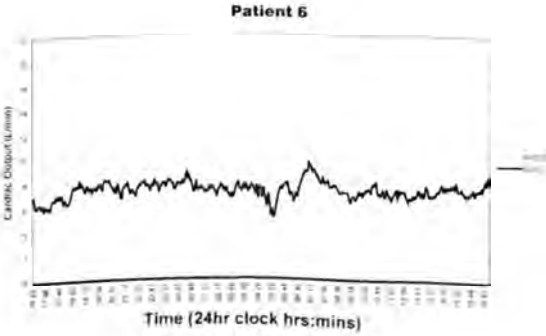
1. Thrush D, Down J, Smith R. Continuous thermodilution cardiac output: agreement with Fick and bolus thermodilution methods. *J. Cardiothoracic & Vascular Anaesthesia 1995; 9: 399-404.*
2. Boldt J, Menges T, WollbruckM et al. Is continuous cardiac output measurement using thermodilution reliable in the critically ill patient? *Crit Care Med 1994; 22: 1913-8.*
3. Lefrant J, Bruelle P, Ripart J et al. Cardiac output measurement in critically ill patients: comparison of continuous & conventional thermodilution techniques. *Can J Anaes. 1995; 42: 972-6.*
4. Wesseling KH, de Witt B, Weber AP et al. A simple device for the continuous measurement of cardiac output. *Adv.C'vasc.Phys.1983; 5: 1-52.*
5. Bland J, Altman D. Statistical methods for assessment of agreement between two methods of clinical measurement. *Lancet* 1986; 1: 307-11.
6. Bock JC, Barker BC, Mackersie RC, Tranbaugh RF, Lewis FR. Cardiac output measurement using femoral artery thermodilution in patients. *J Crit Care 1989;4(2): 106-11.*
7. McLuckie A, Murdoch I, Marsh M et al. A comparison of pulmonary & femoral artery thermodilution cardiac indices in paediatric intensive care patients. *Acta Paediatr 1996; 85: 336-8*
8. Harris AP, Miller CF, Beattie C et al. The slowing of sinus rhythm during thermodilution cardiac output determination and the effect of altering injectate temperature. *Anesthesiology 1985; 63: 540- 1.*
9. Jacquet, Hanique G, Glorieux et al. Analysis of the accuracy of continuous thermodilution cardiac output measurement. *Intensive Care Med 1996; 22: 1125-9.*
10. Buhre W, Weyland A, Kazmaier S et al. Comparison of cardiac output assessed by pulse contour analysis & thermodilution in patients undergoing minimally invasive direct coronary artery bypass grafting. *J Cardiothoracic & Vascular Anesthesia 1999; 13: 437-40.*
11. Goedje O, Hoeke K, Lichtwarck-AschoffM et al. Continuous cardiac output by femoral a. thermodilution calibrated pulse contour analysis: comparison with P.A. thermodilution. *Crit Care Med 1999; 27: 2407-12.*

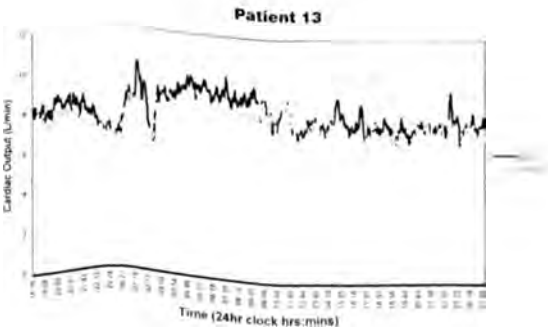
APPENDIX











STUART RECEIVES HIS PRIZE FROM OHMEDA'S BOB GRAY

TRAINEES PRIZE 2001

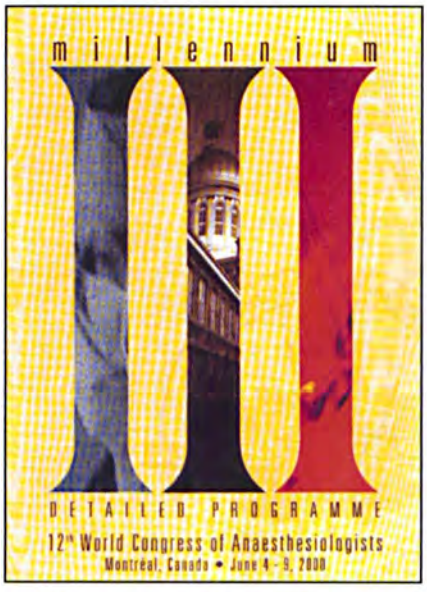
Council has changed the format of the competition this year

Up to 5 papers will be selected for 10 minute presentations at Peebles in April

The top paper wins £250 and its author will be invited to return to Peebles in 2002 as a guest of the Society. Further prizes will be awarded to finalists.

Details from S.S.A. Secretary Neil Mackenzie at Ninewells Hospital
Entries to be submitted by the end of February.


12th World Congress of Anaesthesiologists
12e Congrès mondial des anesthésistes
12° Congreso Mundial de Anestesiólogos


millennium
DETAILED PROGRAMME
12th World Congress of Anaesthesiologists
Montréal, Canada • June 4 - 9, 2000


12th WORLD CONGRESS OF ANAESTHESIOLOGISTS
MONTRÉAL
2000
CANADA
12e CONGRÈS MONDIAL DES ANESTHÉSISTES

A REPORT ON THE World Congress in Montréal

donald thomas *stracathro hospital*

The 12th. World Congress of Anaesthesiologists was held in June 2000. I was in Montréal with more than 10,000 participants from 139 countries.

The scientific programme provided an update since the previous congress in Sydney four years ago. Every conceivable speciality interest was given coverage with up to ten concurrent sessions over the five days.

Some speakers or subjects attracted far more delegates than could fit into the allocated room, but a pre-booking system would be almost impossible to run. While the quality of most presentations was high, there were inevitably a few holes in an event of this scale. A sizeable contingent from Scotland contributed socially as well as scientifically.

The World Congress allows organisers of sub-specialty groups to hold their own satellite meeting before or after the main event. I attended the ISRA symposium in Québec City. This was a first class event.

Of particular note were the practical block sessions. These were both workshops with live models and a video link with Toulouse. It is very brave to invite a few visitors to observe live sessions, still more to use cameras to allow many hundred to watch, but their confidence was fortunately well placed.

Montréal is more than able to host such an event. Our convention centre accommodated the numbers almost without a hitch. Modern technology was used to provide an electronic messaging service for all delegates, as well as a free cyber café in the exhibition hall.

Trade delegates vied with one another to attract visitors (using ice cream and pancakes). Many of the North American reps had little experience of Europe, but this was rarely a problem.

An organised social programme provided tours of the city & province. Evening entertainment included a visit to the opera, baseball, figure skating and an orchestral concert in the impressive Notre-Dame Basilica. Another evening saw the re-enactment of Québec's history, with a sumptuous buffet in a former railway station. As became apparent in further travels, Canada's tourist trade plays heavily on the country's past. The local restaurants and hotels provided a high standard of service and in return did good business.

The whole event has something of an Olympic feel, with each venue striving to out-do the last. Year by year (or four) costs escalate - where will it end? *(Paris hosts the next one in 2004.)* At a time when my own Trust has virtually ceased funding study leave, I have to question the value-for-money of such an event. However it was good to see that the WFSA had a fellowship programme to assist young anaesthetists from developing countries who might otherwise be unable to attend.

If a future World Congress is to be as successful as Montréal, it will need to continue to attract the numbers by providing something more than national events.

Above all Montréal provided an opportunity for anaesthetists from many backgrounds to meet in a stimulating environment.

Scientific Meeting

Kings College, Aberdeen

John Mackenzie welcomed members to the magnificent Senate at Kings College, praising them for overcoming various travel difficulties in getting there. He promised a first-class programme - and we duly got it.

Alastair Chambers presented *Pain Management in Palliative Care - the Role of the Anaesthetist*, with emphasis on home epidurals he'd introduced at Roxburghe House. Alastair outlined how contraindications become relative in the face of uncontrolled pain or side-effects - he wouldn't normally do a block in an isolated site with no medical cover, perhaps in the presence of infection or coagulopathy, then send the patient home with a pump delivering bupivicaine, clonidine & diamorphine. Alastair reviewed mechanisms of referral, consent & basic management before sharing his results in approx. 75 cases - excellent analgesia & very few side-effects.

Steve Scott's title *Smoke Signals & the Cavalry*, reflected an intensivist view of rescuing certain sick patients from sub-optimal care in ordinary wards. He reviewed care & outcomes from McQuillan & from SASM, where poor assessment & recognition of complications, low nurse or junior medical staffing levels & inexperience often led to late ITU referrals. Steve advocated improved vigilance of clinical signs with scoring systems & clearer charts highlighting deviations, which empower nurses to call senior doctors to attend. Hospital organisation (buildings, manpower & culture) could also improve, with perhaps a 24hr. patient-at-risk care team. Critical care education is urgently required for physicians, surgeons & students.

Prof. Rhona Flin (Industrial Psychology Group, Aberdeen Uni) offered insight into *Managing the Safety Climate - with Lessons from High-Reliability Organisations* such as nuclear power generation, oil exploration & (inevitably) aviation. A sparky & provocative lecturer, Rhona challenged us to match the safety culture of other high risk industries who had devised better systems twenty years ago. She stressed senior managers must be empowered to allocate resources & make time for safety. Organisations must have safety targets, just like they have production or budgetary goals. Rhona also advocated a humanistic management style - noting incidentally that perception drives behaviour - and supported upward appraisal to drive sloppiness out of the body corporate.

Gillian Fletcher (from the same Dept.) presented her two year study into *Anaesthetists' Non-technical Skills* in collaboration with our Simulator Centre at Stirling. She acknowledged that anaesthesia was a complex, uncertain, high-risk task; it required situation awareness, effective decision-making skills & cognitive coordination under conditions of time-pressure & other stresses. Gillian had conducted interviews, using a University of Texas flight management survey, to evaluate our leadership, team-working, multi-tasking & expertise in emergencies. She reviewed critical incident reports and concluded that non-vigilance, haste, distraction, fatigue & poor communication were factors in fault-generation. On attitudes, she asked whether error were viewed as a sign of incompetance or whether we'd accept the most junior person in the OR speaking out if he saw you making a mistake. She's trying to develop a taxonomy (a structured list) of our non-technical skills, looking at the simulator for exemplars of our capabilities under stress.

After an excellent lunch & leisurely look at the trade exhibition, we were welcomed back by Vice-President **Farquhar Hamilton** who invited **Prof. Gwyn Seymour** to give *A Geriatrician's View of the Older Surgical Patient*, focussing chiefly on cardiac risk for surgery. Gwyn gave a broad review of clinical predictors, functional capacity (MET units) & AHA algorithms to direct tests & therapy. He talked of inequity of access to surgery, revealing that a (? self-imposed) class bias appears to increase with age.

John Ross chose the intruiging title *Where's Granny?* to tell tales of CO poisoning requiring hyperbaric therapy. Most cases now are not self-poisoning but result from faulty gas central heating. After refresher discussions on environmental & endogenous monoxide, John detailed interesting cases such as *"Mother's in the Kitchen"*, *"Granny"* and the tragic tale of fifty lethal flats in Fife.

Gillies Lecturer **Ed Charlton**, involved in pain therapy for 30+ years, including five in Seattle, delivered an authoratative, entertaining talk on Anaesthesia Safety. He reckoned our speciality has a record second-to-none in the UK and viewed our progress in revalidation with some pride. Like aviation, Ed's message is "keep the pointy end going forward!" At the conclusion, he was delighted to receive the Society's Caithness Glass bowl.

STEVE SCOTT, RHONA FLIN, GEORGINA FLETCHER & ALASTAIR CHAMBERS
ENJOY THE SUNSHINE IN THE KINGS COLLEGE QUADRANGLE

ORGANISERS KATHLEEN FERGUSON & GORDON BYERS
WITH AFTERNOON SPEAKERS GWYN SEYMOUR & JOHN ROSS

KEEP THE POINTY END
GOING FORWARD!

TWO ENGLISH LIONS
GET ACQUAINTED

VICE PRESIDENT
FARQUHAR HAMILTON
MAKES THE PRESENTATION
TO OUR GILLIES LECTURER
ED CHARLTON

GILLIES LECTURE

safe practice

Ed Charlton *Newcastle-upon-Tyne*

It is a great honour to be asked to deliver the Gillies Lecture. Successive Gillies Lecturers have dwelt upon the contributions of John Gillies to Scottish and to British anaesthesia. These do not need repeating by me except to say that the theme of this afternoon's presentation is one that was dear to his heart and to that of his family. The theme is that of safety.

The Safety Committee

Safety has long been a concern of anaesthesia. When the Association of Anaesthetists of Great Britain & Ireland was founded, one of the original committees was the safety committee. Perhaps the most debated area of our clinical practice is patient safety and it is, in my view, the area where we should have the most pride. The remit of the Association's Safety Committee's is to look at any aspect of anaesthetic safety and report to Council and through Council to the membership.

The current work of the Safety Committee is to review the monograph on standards of monitoring. Thereafter they propose to review syringe labels and new developments in the avoidance of needle-stick injuries. In his report for last year, the Chairman of the committee Dr. Dick Birks wrote that he felt that the most important issue for the Safety Committee this year would be to discuss whether its remit should be increased to encompass issues such as clinical risk & good practice which form part of the reaccreditation process. The introduction of compulsory reaccreditation and revalidation brings safety matters to an individual level which none of us can ignore, because if we do, some bureaucrat or bean counter is poised to point the finger at your practice and will extract penalties.

If you need evidence of what this means, you need look no further than the draft personal portfolio designed by the Royal College of Anaesthetists. This includes a section where you are invited to list any complaints that are made against you. There are two aspects you might want to consider here - the confidentiality of the portfolio & verifiability of any complaints that are made. Recall for a moment where this personal portfolio is going. It is easy for management or bureaucracy to collect data & use it in a way that suits their purposes but, as we shall see the NHS has no track record at all of using data for improvement of care or patient safety.

I guess by now you will recognise a hobbyhorse when you see one. Everything we do as anaesthetists concerns patient safety and we cannot afford to be complacent at any time. Looking at new ideas or giving fresh consideration to old ideas is something we should all do. We should encourage those among our profession who have a responsibility for safety (such as the Safety Committee) to do the same thing. However, concern for safety should mean that we place pressure on every body that influences how we provide care: this would include the College, the NHS as our employer, trusts, hospitals & the defence societies. Meetings like this can provide an independent forum to debate & consider the merit of ideas about safety. It can also act as a conduit for passing ideas onwards.

Patient safety seems to have become flavour of the month at last and happily anaesthesia's role in achieving greater safety has been given due prominence. As a specialty, our track record is second to none. The National Confidential Enquiry into Perioperative Deaths was started by the Association of Anaesthetists and is something which we should be very proud of. Critical Incident Reporting was pioneered by anaesthesia and after a couple of hiccups over the timing of its introduction, is now an established part of our practice. In America the Anesthesia Patient Safety Foundation has sbeen praised as a potent factor in improving the safety of clinical practice.

The Size of the Problem

The current interest in safety in medicine has been kick-started by a report of the Institute of Medicine of the National Academy of Sciences in the USA, entitled *"To Err is Human. Building a Safer Health System"*[1]

This document received extraordinary coverage and attracted attention throughout America from patient groups, professional societies & onward via politicians up to the President himself. However, this isn't surprising when you consider the information it contained, derived from a study carried there in the 1980's.[2]

A medical chart review of patients admitted to 51 hospitals over a year disclosed that adverse events - injuries caused by medical management that prolonged admission or produced disability at the time of discharge - occurred in 3.7% of admissions. Analysis showed 69% of injuries were caused by error. From these data it has been estimated that at least 44,000 & perhaps as many as 98,000 Americans a year die from preventable errors in hospital. The annual toll exceeds the combined number of deaths & injuries from motor & air crashes, suicides, falls, poisonings & drownings. In addition, there are 1 million additional injuries. Thus medical error was characterised as being one of the top ten leading causes of death in America.

The report singles out anaesthesia & a body which you are now familiar with - the Anesthesia Patient Safety Foundation (APSF) as being a good example of efforts by a specialty to reduce the incidence of medical error.

The Institute of Medicine is a very high profile national body and their report contained phrases such as:
"Few professional societies or groups have demonstrated a visible commitment to reducing errors in health care and improving of patient safety. Although it is believed that the commitment exists amongst their members there has been little collective action. The exception most often cited is the work that has been done by anesthesiologists to improve safety and outcomes for patients. Anesthesiology has successfully reduced mortality rates from two deaths per 10,000 anesthetics administered to one death per 200,000 to 300,000 anesthetics administered" (Similar figures to those found in the NHS).

The report singled out technological change with monitoring & standardisation of equipment, adoption of guidelines & strategies, increased use of simulators, application of what they called "human factors" and particularly, the formation of the Anaesthesia Patient Safety Foundation. This, it believed, resulted in it becoming a focus for people of different disciplines and interests to concentrate upon patient safety.

The only comparable study, from Australia a decade later, produced even higher rates of error. [5]
An adverse event occurred in 16.6% of admissions, resulting in permanent disability in 13.7% & death in 4.9%. 51% of the adverse events were judged to be preventable. Thus the estimates of mortality & morbidity in this study were of 18,000 unnecessary deaths & 50,000 patients becoming disabled.

There's only one other comparable study - also American - and this showed similar results. I do not think we can assume that the high figures quoted represent practice in a foreign country over a decade ago. There are lessons for Scotland & the rest of Britain too.

Analysts estimate that these results represent the lower boundary of prevalence of medical injury & error and represent under-reporting. A recent BMJ editorial about medical error estimated one patient would die & eight others would be injured in the time it took to read it. These data relate to problems in hospital. Comparatively little is known about the incidence of problems outside hospital, as any data that are available only refer to problems that are sufficiently severe to merit admission to hospital. However, you can get a flavour of the problem by considering drug related morbidity & mortality. Figures from an American study, 1997. [6]
The probability of adverse outcomes occurring as a result of drug treatment were calculated as follows:- drug-related problems accounted for 116 million extra visits to the doctor, 76m additional prescriptions, 17m emergency visits, 8m hospital admissions, 3m admissions to long-care facilities and 199,000 additional deaths. The total cost was estimated at $76.6 billion - a similar amount to caring for all diabetics in America.

It should be emphasised that anaesthesia contributes very little to this sorry picture. Most problems have occurred before the patient gets as far as anaesthesia except one category - misdiagnosis and this is intimately linked to another common category - operative error. Again, not our fault but certainly having an impact upon our practice. These factors have been extensively studied in England, Wales & Northern Ireland as part of NCEPOD, which has made recommendations about clinical practice: who should operate & when and the clinical care associated with emergency surgery.

The reports have made recommendations about provision of High Dependency & Intensive Care beds and the continuity of postoperative care. However, a common theme is that consultation, collaboration & teamwork should be encouraged to be standard practice. The amount of research carried out into team-working in medicine is nothing like as great as that carried out in the aviation industry but there are well-designed comparative studies that show we've a long way to go.

Robert Helmreich & his co-workers have compared how pilots & cabin crew compare to surgeons, anaesthetists & theatre staff and intensive care staff in team working & communications. They identified that attitudes about errors, teamwork, and the effect of stress & fatigue are prime targets for improvement in medicine. The results may not surprise you.

Briefly, 70% of consultant surgeons felt that fatigue had no effect upon their ability to perform their duties, compared to 47% of consultant anaesthetists and 26% of pilots. The effect of personal problems upon performance was acknowledged to the same degree by everyone except surgeons who were far less likely to acknowledge an effect.

Significantly, airline & ICU staff had almost similar attitudes to hierarchy in their working environment. Both felt junior team members should be able to question decisions made by senior members. The most damning indictment of team work came when questions specifically referred to working with surgeons. Consultant surgeons rated the teamwork they experienced working with other surgeons the highest (c. 70%). Surgeons rated high levels of team work with anaesthetists at 62% whereas the consultant anaesthetists rated high levels of team work with surgeons at 40%. Anaesthesia trainees rated high levels of team work with consultant surgeons at 10%.

Both airline crew and those in healthcare are expected to perform without error. We have read in the papers for the last couple of years how far away from that target we are. Clearly, improving teamwork is one area where large strides can be made. One way forward is the abolition of hierarchies. We need to be aware of the effects of stress & fatigue, we need to develop working practices that avoid or compensate for these problems. We need to change attitudes. Surgeons believe that they are doing wonderfully well with teamwork whereas those they work with don't buy it. We may have the same problems in intensive care where doctors rated teamwork with nurses much more highly than nurses rated their relationship with doctors. Interestingly, aviation has made the biggest change to team working by moving away from training individuals to training the entire crew. Perhaps when we use simulators we should bring in the anaesthetic nurses, ODA's, theatre staff & surgeons too. Despite appearances, the operating theatre is a lot more complex than an aircraft cockpit, and aircraft tend to be a lot more predictable than patients.

It is apparent that although we have made progress towards improvement in patient safety there remains much to be done. Every new technology we introduce will bring it with it new forms of error. There are no "quick fixes" and it is axiomatic that we must examine what we do and try to make our many & complex systems less vulnerable to human error.

Change, we are told repeatedly by our political masters, is as much cultural as technical. I would argue that anaesthetists have already adopted the safety culture years ago. This doesn't mean to say we've got it right; and I hope to indicate areas where we can still improve, but we are, perhaps, a bit further along the road than many other specialties.

The areas where we need to look are not only the design of tasks & equipment, but also the conditions under which we work - hours, rotas & workloads. It seems medics are alone in hanging onto a tradition of working in jobs that involve multiple competing priorities, sleep deprivation, excessive hours & lousy food. We need to consider team working and how we, & the others we work with, are trained in safe practice. If we are to do this we need support from our specialty leaders to achieve the necessary change. The public's expectation is enormous - we shouldn't be in the position of harming them with the care that is supposed to help them.

As part of the process of change we are required to espouse accreditation. This is being marketed as something to protect the individual clinician. It isn't that; at its core, it is a risk reduction activity. Accreditation begins by the setting of standards and then encourages specialty groups to comply with these standards. The basic premise is that if you reach the standards you are going to be doing less that is questionable or wrong. Anaesthesia has looked at the relationship of error and adverse outcome for some time.

This started in the early 90's with Prof. Bill Runciman's Australian Incident Monitoring Study (AIMS). The College and then the Pain Society has had a similar, but very little used, scheme for many years. The desire to use a critical incident reporting scheme just didn't seem to be there. Perhaps recent events will change this and this may be related to the fact that we haven't done much to identify the links between errors and adverse outcomes and system or organisational processes.

"The time has come to get serious about reducing medical errors".

There is no question that concern about patient safety is rising & as usual, others follow anaesthesia's lead. The report of the House of Commons Health Select Committee last year suggested the Dept. of Health should maintain a national database of what they described as "adverse clinical incidents in the NHS". Recently, the Chief Medical Officer has announced that an adverse events reporting system will be established within the NHS. The CMO's report says we should have an open culture in which errors & service failures can be discussed and asks that we put in place mechanisms for ensuring we respond to problems & institute change. He forgot to say where the idea came from.

We haven't seen the form the adverse events reporting scheme will take but we must insist that it looks at system or organisational processes as well as simple & obvious critical incidents like a disconnection problem or the injection of an incorrect drug. In the USA hospitals are accredited by a voluntary self-reporting system and this has a system of reporting adverse events in the context of an organisational analysis. The data derived are shared to see if this will provide information that can prevent errors. This sort of activity moves clinical error & adverse outcome up a level to include management so they too join in the process of improving patient care.

There have been suggestions that such reporting schemes should be mandatory, but there is plenty of evidence that voluntary schemes provide more useful information about errors.[4] Mandatory reporting schemes have been used almost exclusively to punish individuals or healthcare organisations - punishment merely acts as a deterrent & the best quality information has been shown to come from voluntary schemes. For a voluntary reporting scheme to be successful the practitioner must feel safe and it then becomes a normal activity. In practical terms this means anonymity & protection for those reporting. NCEPOD is a very good example of what can be achieved with voluntary reporting and there are others such as the Royal College of Surgeons audit of upper gastrointestinal endoscopy where voluntary reporting approaching 100% is achieved.

There are plenty traditional medical ways of discussing near-misses & problems. Morbidity/mortality meetings, peer-reviewed audit & so on, but these all share the same shortcoming, which is that they don't look at human factors or at the systems which may have caused the problem. The person approach looks at the actions of the individual. These may be related to forgetfulness, inattention, poor motivation, negligence & recklessness. Punishment of the individual tends to follow this sort of approach retraining, disciplinary actions, naming & shaming on the basic premise that bad things happen to bad people. That simply isn't true.

A system approach is much more user-friendly and assumes that humans are fallible and errors are to be expected. Errors are assumed to be a consequence of upstream systemic factors rather than the perversity of human nature. Solutions are directed at creating system barriers which will protect the human by changing the conditions in which they work. The high reliability organisations you heard about earlier all have less than their fair share of accidents because they seek to remove error-provoking properties from the system at large. They developed a preoccupation with the possibility of failure - thus lots of training is directed at recognising & treating problems. There is absolutely nothing within modern anaesthetic practice that allows us that luxury, but the lessons are very clear. Perhaps there should be a change in emphasis in our revalidation & reaccreditation to include this. This raises an important point. High reliability organisations introduced near-miss reporting schemes & training programmes because they benefit the organisation more than they cost.

Clinical negligence claims against the NHS have more than doubled in volume between 1990 & 1998, during a time when hospital activity increased by 30%. Overall NHS expenditure on clinical negligence in 1998 was in the region of £84 million including legal costs. The stock of outstanding liabilities was valued at £2.8 billion by the Auditor General in 1999. It is, of course, a false figure because the proportion of claims which are eventually paid is in fact quite low. But this figure of £2.8 billion offered the opportunity for the House of Commons Public Accounts Committee to be "appalled".

We were treated to the observation that this represented a "tragedy" and a "significant drain on stretched health care resources". Of course, there are several examples where efforts were being made to improve matters but the introduction of any additional measures directed at improving patient safety would be more popular if we can show they may benefit the organisation (NHS) more than they cost. That will stop the Public Accounts Committee from getting so vexed.

It may also be appropriate to ask if investment by the health service could be mirrored by some investment on the part of the medical & dental defence societies. It isn't immediately obvious to me that the Defence Societies have joined the movement to get serious about reducing medical errors. Each year the Medical & Dental Defence Union of Scotland & Medical Protection Society give £500 each to the Association for a £1000 Safety Prize This year's Association annual report contained the information that the two applicants for this year's safety prize were not felt to be of sufficiently high standard.

This is pretty ordinary. It's nice the MDDUS & MPS feel that they can give £500 each but it is disappointing the MDU doesn't take part. I'd be a lot happier about our future if I saw Defence Societies investing & supporting the efforts of the professions to improve patient safety, by that I mean sponsoring research. £500 each from two of them for a safety prize strikes me as being a fairly small amount when compared to a total income which must approach £200 million p.a. Even 0.01% of that amount would be a worthwhile investment in looking at safety. Supporting existing initiatives or developing new ones - it doesn't matter. Funding research would impress me that they were concerned; glossy brochures with bland, non-specific homilies about safety certainly don't. There is no doubt in my mind that they could learn from the USA where the insurance industry provided impetus & funding to study adverse events. However, things are little better within the NHS itself. In last week's BMJ there was a letter which drew attention to the fact that the NHS was making no use of the information it has on clinical negligence. [7]

In 1995 the NHS introduced Crown Indemnity. The litigation authority has been responsible for managing the clinical negligence scheme for trusts (this deals with all claims against most NHS trusts from 1995 onwards) and the existing liabilities scheme which deals with all claims originating before that date. This computerised database covers literally thousands of claims. Obviously, not all apply to anaesthesia but it is to the discredit of the litigation authority that it has done absolutely nothing with a complete database of claims for the last five years & an almost complete database before 1995. This is one of the greatest opportunities to examine the causes of clinical negligence & help prevent their recurrence. An interesting light can be shone upon the attitude of the litigation authority with the following fact - at present there is no way to check on the past litigation record relating to individual clinicians. The authority effectively disabled the database when it chose not to collect on computer any data that would identify individual clinicians; even though it has that information in its paper records. The public might view that as a serious mistake when viewed in the light of recent prominent GMC hearings. It must be obvious that this should be rectified so that it is possible to extract data within carefully established rules of confidentiality and data access.

The success of other studies of large databases such as the ASA Closed Claims shows data of this sort can yield incredibly valuable information without compromising or threatening individuals. A leader in implementing clinical governance, Prof.Aidan Halligan claims the NHS contains 5 times more data than the Pentagon. I guess the trouble is it can't get at most of it in a meaningful form - of course that may be the same in the Pentagon!

A Patient Safety Foundation?

There has been a continuing debate about the value & need for a body like the American Anesthesia Patient Safety Foundation. The August 19-26 issue of the BMJ contained a letter from the current Association President Professor Strunin, his predecessor Dr Morgan and my good friend & colleague Dr Paul Cartwright, writing in his capacity as Chairman of the Association Standards Committee. They were writing in response to an article by Dr David Gaba in the March 18th. BMJ [8] who suggested anaesthesia could be used as a model for patient safety in health care and having an Anesthesia Patient Safety Foundation was fundamental to this. Our British leaders cited the differences between anaesthesia in North America and anaesthesia in the UK as the reason we didn't need a body of this sort. They offered the following arguments: all our anaesthesia is, of course, given by medically qualified, properly trained anaesthetists - anaesthetists who have a very broad range of training & interest. There are differences in the medico-legal systems & medico-legal pressures between the two countries. They noted that health care was not centralised in the United States as it is in Great Britain and suggested that the power & influence of the Royal College and the Association of Anaesthetists were sufficient to ensure the safe provision of health care within Great Britain & Ireland so that we did not need a separate Patient Safety Foundation.

"Anaesthesia in the UK, as in the US, seems safer than ever. Nevertheless, things still go wrong & may cause significant considerable harm to patients. However, we do not think we need a separate patient safety foundation in the UK. Although it is currently fashionable to decry organisations such as colleges & associations in the rush to "modernisation", our track record needs no defence. We have committed leadership & an excellent framework for the future. However, we are not complacent and agree that *the price of patient safety is eternal vigilance.*"

Why should we even consider it? For no other reason than I believe we should consider everything that might help. It is apparent that patient safety is becoming a really hot issue and there may be compelling political reasons that we adopt a similar approach. The APSF is a voluntary body and doesn't have any "official" clout. Despite this they (and their catchy title) have managed to raise the profile of safety issues to levels undreamed of here. The issue now commands public attention & the attention of Government. Not only that, but they have attracted corporate sponsorship from 27 commercial companies & insurance agencies and in addition, have a series of community donors & society sponsors who give substantial sums to support this activity.

You have already heard NHS clinical negligence claims have more than doubled in volume to an overall expenditure in the region of £84 million in 1998 with outstanding liabilities valued at £2.8 billion. Perhaps our colleagues are right - we don't need an APSF, but we need a high profile response to this problem. Is saying we should just continue as we are sufficient?

The APSF had made safety high profile. It's made safety something which people want to look at & want to do, so instead of having two entries that didn't quite make the grade for a rather small safety prize, the ASA meeting in Dallas last year had three separate sections on safety which attracted 63 different presentations. This result has not been achieved without fuel & the Foundation has sufficient resources to award three major research awards each year. Importantly, leaders of major US anaesthetic societies did not feel that the APSF had diverted resources away from support of other research & educational activities in anaesthesia. They felt it had added to it by giving the specialty a higher profile. Politically it was an effective method of communicating efforts to maintain an increase in patient safety when this was raised by outside bodies. We all know that we are coming under increasing pressure from Government as they go into doctor-bashing mode to divert attention from other motives. In America this has acted as a shield against such attacks.

As a specialty we have taken effective action when needed - dental anaesthesia immediately springs to mind. NCEPOD & the AIMS scheme were introduced well before other specialties thought of them. Although we have all this praiseworthy activity, it would seem sensible to at least carry out a series of surveys of practising anaesthetists in Great Britain & Ireland to determine what they believe are the most important safety issues. The results could be used to make decisions with regard to our future educational & research goals. Maybe we don't need am APSF, but we are also talking about image & spin. It might serve our interests to consider another sort of body which looks to collaborate with industry, equipment designers & other bodies with interests in safety, for example the Royal Aeronautical Society or a human factors research department.

Anaesthesia has always been compared to flying aircraft and you'll remember the definition of a "good landing" is one you can walk away from. In anaesthesia we need to try for a "great landing" - that's one where you can use the plane again afterwards!

Consider these facts: anaesthesia is correctly regarded as the leading specialty in the pursuit of patient safety. It is safer than ever because of persistent efforts to improve. The introduction of minimum standards for equipment and clinical practice has contributed to safety. Multidisciplinary efforts are needed that include human factors & systems issues. A Patient Safety Foundation may be a forum to achieve further progress.

The APSF has given over $1.5million for research which has yielded over 150 papers either directly or indirectly. It has led major studies on outcome, human factors, human performance & simulators. We are developing the use of simulators in this country too, but we still have some way to go to catch up with other countries. Simulators are expensive but we must increase their use. They train the theatre team to cope with uncommon but critical issues where a rapid response is needed - and do so without risk to patients. There's instant feedback on clinical decisions & comparative data can be accrued. As well as encouraging the use & development of simulators, perhaps the APSF's major achievement is to provide a focus for anaesthesia's public image & present this in a strong, positive way that attracts the attention of the public & government. It has shown the rest of medicine in America how to go about improving patient safety. Why can't it do that here?

To return one last time to the aircraft analogy, one of the basic rules of flying is to "keep the pointy end going forwards". This is what we should do. We should at least look at other ideas to see if we can improve upon the current situation. Let's not dismiss ideas, let's see if there are bits of them that we can steal and make our own to improve what we have at present. As a specialty we should have a strategic long-range plan. This should be regularly updated and we should be looking in changes in technique and influence so we can anticipate what may be needed. Part of this long-range planning should be to try and influence Government and other non-governmental and professional bodies. We need national societies such as the Association, the College and this one too, which will act as umbrellas to cover the specialist societies and support their interests.

Societies such as the Scottish Society exist primarily to look after & protect the interests of anaesthetists. Most of what we do is covered by saying we anaesthetise for surgery. Surgery cannot take place without anaesthesia. The future is said to hold the prospect of surgery assisted by robots or even surgery performed by robots, however nobody has yet to come up with a way of replacing the individual at the head of the table, ever vigilant to change & ever ready to respond. Throughout his career John Gillies recognised the interests of the anaesthetist are those of the patient. Nothing much new there, except we should recognise the object of this lecture - promotion of safe clinical anaesthesia should be uppermost in the minds of our leaders as well as ourselves.

They should be aware that highly publicised negative outcomes still occur. There are still incidents leading to patient damage despite modern monitoring techniques and practitioners who don't follow basic guidelines. Anaesthesia still takes place when the anaesthetist is compromised by tiredness, stress or illness. Knowledge levels remain suboptimal & simulator access is restricted to a tiny minority. Revalidation & reaccreditation is being introduced but we still don't know what form it will take or what effect it will have upon standards of clinical practice. We cannot afford to be complacent.

My final task is simple. I thank the Officers & Council of this Society for the honour of inviting me to give this prestigious lecture.

References

1. Kohn LT, Corrigan JM, Donaldson MS, eds To err is human: building a safer health system. Washington DC: National Academy Press, 1999.
2. BrennanTA*etalNeuEngJMed 1991; 324: 370-6*
3. Wilson RM et al *Med J Aust 1993; 163:458-71*
4. Johnson JA, Bootman JL *Am J Health Syst Pharm 1997;54:554-8*
5. Sexton JB, Thomas EJ, Helmreich RL *Brit Med J 2000;320:745-9*
6. Liang BA *J Health Politics, Policy and Law 1999;24:27-57*
7. Walshe K *Brit Med J 2000 321: 1157-8*
8. Gaba D *Brit Med J 2000;320:785-8*

GOLF DAY

at Glenbervie, June 2000

by our Golf Correspondent Alex MacLeod

Sporting themes dominated the week. The England football team had succumbed to Portugal in Euro 2000 the previous evening; Tiger Woods would go on to win the U.S. Open at Pebble Beach by a record 15 strokes.

Twenty golfers braved the breezy conditions - sufficiently windy that a Scottish Club Professionals Competition on the Duke's Course at not-too-distant St. Andrews was cancelled because their golf balls were blown off the greens! Our early starters removed broken branches and fallen trees from the course.

The morning Stableford was won by (steady) Eddie Wilson with a very creditable 35 pts. Alex Colquhoun (34) was second with past winner Charles Cairns (31) third. However a number of considerably lower totals were posted!

Guy Fletcher, with a remakable display of power & accuracy, won both the longest drive & nearest-the-pin contests.

Conditions moderated considerably in the afternoon and our match-play rounds in the West v East game were completed in warm sunshine.

S.S.A. Vice-President Farquhar Hamilton congratulated Glenbervie Golf Club on both the first-class condition of their course and the excellence of our High Tea, before presenting the trophies & prizes to the winners.

Sadly in the afternoon fourballs, the West side, like England before them, capitulated spinelessly by 21/2 to 11/2.

The Scottish Society's thanks go to Alex for his superb organisation of this event.

The 2001 S.S.A. Golf Outing will be held

at Auchterarder G.C.

on Thursday June 21st.

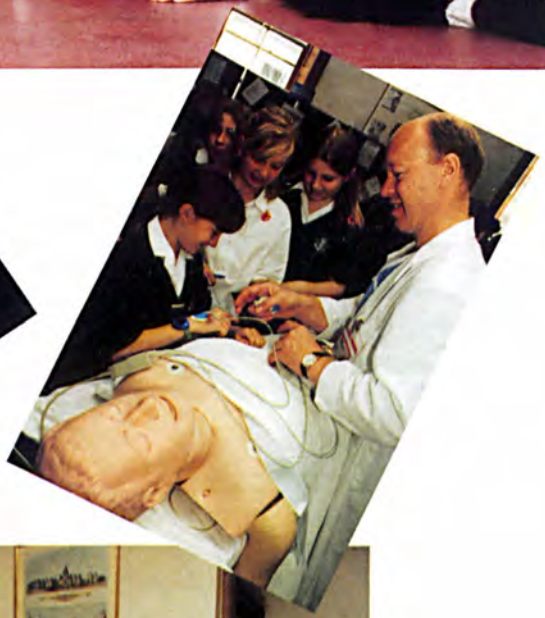
Meeting at 9am for a 9.30am tee time

Please return your entry to Charlie Allison, Stracathro Hospital, Brechin

THE GOLF GANG GATHER AGAIN FOR A GAME AT GLENBERVIE

ALEX - HAPPY WITH HIS ORGANISATION
IF NOT HIS OWN GOLF!

"STEADY" EDDIE WILSON SHOWS OFF THE TROPHY
TO GUY FLETCHER & ALEX COLQUOHAN



NATIONAL ANAESTHESIA DAY, EDINBURGH

Thanks to Medical Photography at the Royal Infirmary for these pictures

around the regions

MANY THANKS TO OUR LOCAL CORRESPONDENTS
FOR ALL THEIR HARD WORK & DEDICATION

EDINBURGH ROYAL *David Watson*

Professor Ian Power has been appointed to the University Chair of Anaesthesia, Critical Care and (probably) Pain Medicine. Ian is well known to the Departments of Anaesthetics in Lothian & Glasgow and of late has been Associate Professor at the University of Sydney. We warmly welcome him & his family back to the blue skies, unparalleled sunshine and the warm coastal inlets of Scotland.

The structure of the New Royal Infirmary is now more evident at Little France. The planners seem to have thought about the basics as it lacks a flat roof. Our present multi-disciplinary bucket task force, required during heavy rain, will soon become redundant. We still have concerns about proposed staffing arrangements & bed numbers; but until the pink ribbon is cut & the brass plaque exposed, little is certain. A major worry is whether we improve upon the name & call it something more fitting. Suggestions have regularly appeared in our local rags & waste-baskets.

As part of National Anaesthesia Day, exhibitions were held in the remaining Edinburgh hospitals. Everything ran smoothly owing more to good organisation than luck. The emphasis was on education & fun, with a combination of static & interactive displays, a quiz and an amusing, surreal re-enactment of James "Young" Simpson's early forays into chloroform anaesthesia.

After such public performances the department hoped that those involved would be lost to new careers. The greatest numbers of attendees came from local schools and the teachers, as you could imagine, had enormous difficulty in stopping youngsters staying for more. The lessons taken on-board were that there are significant costs to organising such activities. Secondly, it is difficult to know whether the general public are really interested in learning more about the work we do. We are indebted to Dr. Arnstein and his team of Thespians - the evidence is opposite.

There have been changes at Patient Services Director level where Dermot McKeown relinquished the reins to Janet Jenkins. Nigel Malcolm-Smith retired but thankfully agreed to train & teach students on a regular basis. We wish him well - the "envy" word has crossed many lips. His prowess with the bagpipes will no doubt continue to be heard at anaesthetic soirees.

Mary Pollok has been appointed as a consultant. Ian Armstrong has left temporarily for Christchurch, N.Z. - his liver transplant & ITU commitments have been filled by David Watson. Alexandra Stewart returned from Canada, Jon Redman went to Australia & Caroline Brookman moved to the Western General as Locum Consultant. Lindsay Donaldson arrived in Edinburgh & Sanjiv Chohan moved to Christchurch but both continue their Intensive Care training. Trudy Ballantine represented the UK in South Africa as a T.V. *Gladiator* before moving on to Auckland.

Staff congratulations are in order for five more babies (different parents) & two weddings (not yet parents). There have been many new trainees appointed over the past year. They continue to travel the world to Canada, South Africa, Papua New Guinea, Australia & New Zealand. We wish everyone the very best & hope they can come back soon to do the week-end on-call.

WESTERN, EDINBURGH *David Wright*

A TRIBUTE TO NICK GORDON

Nick Gordon, a Consultant here for 25 years, died in October. A staunch supporter of the Scottish Society, Nick contributed hugely to many aspects of professional life. He had been Chairman of the Lothian Area Medical Committee and the Medical Staff Committee at the Western and brought to these responsibilities hard work, common sense & enthusiasm.

Nick had a particular interest in and aptitude for paediatric & neurosurgical anaesthesia, setting high standards by his skills and his attention to detail. He was very supportive of young colleagues, being always ready to listen & give sound advice. He enjoyed taking on challenges and encouraged others to do the same; and his unfailing good humour & imperturbable nature were an inspiration to his friends & patients.

A reception was held at the Royal College of Physicians in Edinburgh on December 9 to celebrate his life. It was attended by several hundred people, including family friends, nurses, ODAs and anaesthetists from near & far, past & present. Reference was made to Nick's love of gadgets, his dress sense & many bow ties and his persuasive powers of communication.

Nick Gordon will be remembered not only for these, but also for being a remarkable character who enriched the life of many.

BORDERS *Janet Braidwood*

Janet Wilkie (previously temporary) and Cameron Smith (previously a locum) now hold substantive Staff Grade posts. Associate Specialist Chris Richard returned from two years in Edinburgh completing CCST. We welcomed Hameed Hamedullah to Scotland from Pakistan - he's starting a fixed term training attachment to the S.E. Region.

There have been no consultant changes this year. We have however had to remember how to be resident first on-call and are thus now feeling both virtuous & rather tired.

ST. JOHN'S LIVINGSTON *Duncan Henderson*

All change at St John's. Bill Brown and Pin Teh retired this year. Pin enjoys travelling the world, expanding her already encyclopaedic knowledge of gardening. Mike Shaw returns to his native Australia - he's looking forward to being a trainee for a year and sitting their Fellowship. We'll miss them all.

We welcomed new consultant Dan Burke (ex-Dundee), John Kent (as Staff Grade) and Simon Rowbotham returns after eight years as a Consultant in Hong Kong.

In October St. John's hosted the Intensive Care Society's first foray North of the Border & the Scottish Acute Pain Study Day. Our catering services did us proud and the feedback was very positive from both events.

Mike Fried, Donald Galloway & I now plan to retire from the relaxing hobby that is organising meetings.

HAIRMYRES Jean Lees

Since our last report *(has there ever been one?)* the department & Hairmyres have changed out of all recognition. We're in the final, frenetic weeks preparing for a move into a new hospital, PFI-built in record time in the grounds & fully operational soon.

A preliminary foray to check anaesthetic areas was a pleasant surprise - the decor was fresh but soothing and the theatres & ICU impressively spacious & well-equipped. The external appearance however is less soothing - rumour has it that the roof was a surplus job lot following recent renovations at Ibrox.

Founding fathers Frank McGroarty & George Davidson have retired on health grounds and we wish them well in the future.

We welcomed Brian Cook from Edinburgh to lead ICU/HDU - his experience & hard work have been invaluable in preparing the move to the new 10-bedded unit. Mike Crawford returned from Aberdeen and has already established himself in many important roles. We have been joined by Grant Haldane from GRI and Veronica Watson from Swansea (originally Glasgow). Just in the door is local boy Andrew Mitchell, until recently a Birmingham SpR. We welcome them all, finding it a great advantage to have a broad practice of anaesthesia from north & south of the border.

We're now part of a Lanarkshire Trust with Monklands & Law. Full integration will be a slow business but we're having regular inter-departmental meetings with progress on pooling skills & teaching opportunities. Each department works much as before with most of *our* energies concentrating on the imminent flitting.

LAW HOSPITAL John Martin

This report is our swan song from Law. Appropriately for 2001, we'll be making an odyssey to our new home at Wishaw General. I have a group of typographers searching for a font worthy of the new name - Wingdings seems the obvious choice.

Our consultant body is at present stable. Alan Masterton has taken up a definitive post after a short locum. Our other permanent staff have at their core Raj Velu & Abdala Fouad (Staff Grade) who continue to provide a valued contribution. Work-wise we wait, with a modicum of trepidation, that significant change when we move house. We'll then see an increase in our obstetric workload by a factor of three, from 1500 to 4500 deliveries a year!

Meanwhile, a flurry of managerial activity fills us with confidence that the move will be a smooth, seamless one. The Millennium Committee formed, with no expense spared, to minimise the effect of the bug on our systems (a bit of a damp squib that one, eh?) has metamorphosed into our Migration Planning Committee. What will they think of next?

In the midst of all this, National Anaesthesia Day came & went, but nobody noticed.

MONKLANDS David Clough

We continue to develop with all recent appointments settling in. Vimty Muir is on maternity leave having had a baby boy. Mike Inglis continues as C.D. & is involved in ITU/HDU development. Alastair Naismith is Associate Medical Director & seems to be busier by the day. Rory McKenzie is ITU Lead Clinician & is fully occupied with HDU as well. We have had the pleasure of Andy Woods as locum consultant before he heads for Australia.

Scott Marshall furthers the cause of day surgery & audit with vigour. Tracy Dunn, when not up a Munro, is the Lead Clinician at Bellshill Maternity and is planning for the move to Wishaw. Veronica Reid is heavily involved in the LNC, a time-consuming role in view of our new Trust. Jo Thorp is looking at paediatric services in Lanarkshire; Mariette Brink is busy with this here.

The SHO rotation with Glasgow Royal is now well established and proving useful in their career progress. I try to keep pace with the rapidly-developing college tutor role & the training programme changes. Paul McMurray maintains his struggle with the rota, a task much aided by his dry wit & optimism in the face of adversity. Peter Paterson still enjoys good health - his interest in cycling keeps him fitter than the rest of us!

Monklands remains a very busy but happy place to work - the months & years fly by!

GLASGOW ROYAL Alex Patrick

Now of course we are one big happy family with our colleagues in the Western & Stobhill in the North Glasgow University Hospitals Trust. Rumours & counter-rumours fly about possible organisational changes and, while the consultation period has ended, we wait with bated breath to see what specialities will move where to "rationalise" the service.

As yet we haven't noticed substantial changes, except that our newest consultants, Carol Murdoch & Colin Rae, have commitments at both Stobhill & the Royal.

The end of an era is marked by the demise of another set of split posts we've had with the Royal Hospital for Sick Children. Donald Miller retired and Douglas Arthur & Roddie McNicol gave up their adult sessions to work exclusively at Yorkhill.

Work on the new Maternity block continues - outside it looks relatively complete, if rather dull. Our obstetric anaesthetists look forward to that day in the summer when they will have two labour wards to run, at Rottenrow & Alexandra Parade, while the service is being transferred. The completion next year of the Plastics & Emergency Receiving Unit here will signal another historical landmark with the closure of Canniesburn.

Our contribution to National Anaesthesia Day was organised by Drew Smith who, with others, tried to explain the role of the anaesthetist to a somewhat bemused & largely uncomprehending Royal Infirmary clientele. Perhaps by the centenary N.A.D. in 2099 they will have got the message!

SOUTHERN GENERAL Bill Kerr

The year started quietly with us standing in ITU waiting to see whether the *Kontron* monitors would turn over or fail. Unfortunately (for once) they performed satisfactorily and we celebrated the new millennium with non-alcoholic champagne & kisses all round - most invigorating! I then proceeded to the control bunker, where a group of rather sad-looking senior managers were busy tabulating bed & mortuary availability figures for those control freaks in Edinburgh. Does anyone want any unused emergency mortuary shelving, by the way? Then it was back to the party and thence to bed. All in all, the millennium proved to be the non-event of the century.

National Anaesthesia Day came a close second though. One of our lady anaesthetists volunteered to co-ordinate activities for reasons best known to herself - then did nothing about it. Her most prescient remarks were that anaesthesia only attracted notice when things went wrong and the logo looked as if patients were praying they'd wake up at the end of the op.

And so to June, when happily I was away on holiday golfing in Dunbar & incommunicado when news of the fatal accident hit the press fan. Our Medical Director Brian Cowan fielded the flak - I suspect he still holds this against me. There then followed a summer of clinical governance; only now are things starting to return to normal. The date of the F.A.I. has still to be intimated.

On a more cheerful note, Lew Chin Chee & Morag Hume had baby boys & Daphne Varveris is going off on maternity leave. We do seem to be good at something after all. I can't wait for the SHOs to get in on the act! John & Maggie MacDonald went off to New Zealand to work for a year in Whangarei and threaten to come back soon. Drew Inglis joined us as a consultant shared with the Victoria - he's settling in well on both sites.

Greater Glasgow Health Board have now completed their public consultation exercise on reorganisation of acute hospital services I am not sure what purpose it served other than as a cathartic/laxative/vox populi exercise. Essentially everyone said exactly what was predicted. Very few people listened apart from the converted on both sides & almost no-one changed their opinion. It now looks as though they will put the original plan to the politicians at the end of the year. Don't hold your breath waiting for a decision from the latter.

I did intend last year would be my last as clinical director. Management keep extending my contract & it would be churlish to refuse the money. They've now published a new structure splitting the hospital into four divisions, each with a general manager in operational & financial control. Anaesthesia will be in a service division & there will be a C.D. with responsibility for both the Victoria & Southern General. It won't be me.

VICTORIA INFIRMARY Gavin Gordon

This report falls to me, as I follow in Cammy's footsteps as C.D. Although we continue here, plans are well afoot to begin merging clinical services within the two hospitals that comprise the South Glasgow Trust.

Our one consultant addition Andrew Inglis, took up his post. In the spirit of merging, Drew has ITU sessions at the Southern while the rest of his anaesthetic work is here at the Victoria (shades of things to come!)

We wait with anticipation, or possibly trepidation, the Board or Health Minister's decision as to where the new south-side hospital will be built. Management changes clearly pre-date any new build and it is hoped that this effects a smooth transition to one hospital without too many tears.

WESTERN INFIRMARY Colin Runcie

Little has changed here since our last report. Kirsteen Dewar's departure represents another nail in the coffin of what was once a proud department and we wish her a long & happy retirement.

Colin Rae has moved on to a consultant post in the Royal while Alex MacLeod is now our Department Chairman & Deputy REA. He will surely soon take over Peter Wallace's position of influence in West of Scotland anaesthesia.

Perhaps the brightest light in the gloom was a lavish, entertaining departmental B.B.Q., generously hosted by one of the hospital's jauntiest figures, Colin Runcie.

YORKHILL John Sinclair

Another eventful year here. We bade Donald Miller a fond farewell after many years, though he can't quite stay away yet. I think he bagged more "singing fish" in retirement presents than he ever caught real fish at Scottish Society's outings!
His successor David Robinson returns from Manchester (welcome back to Scotland - in truth you never really left).

On the PICU front, we appointed Andrew McIntyre, as our first full-time paediatric intensivist. Though not an anaesthetist, Andrew has honorary status in our directorate, (but then with the formation of a joint anaesthetic/surgical board, so far working surprisingly well, we may yet offer honorary status to surgeons too!)

Our new specialist SpR is Phil Bolton, freshly trained from Dundee, who replaces Pam Cupples. We haven't let Pam go - she's doing a consultant locum for us, as is Graham Bell.

At a national, nay international level Douglas Arthur is keeping Yorkhill's profile high as the APA President. He is representing our interests in his own inimitable style and amongst many other issues is helping to address the difficulties of accrediting the subspecialty of paediatric anaesthesia.

Meanwhile, the ESRA Meeting looms large on the horizon. Jane Peutrell constantly updates us on what will be one of the "don't miss events" of the paediatric anaesthetic calendar.

Pam Cupples got married (congratulations!) and Roz Lawson returned from maternity leave with a healthy bouncing boy (with quite reasonable venous access on the back of each hand).

As to the future, it looks as if we are going to spend a large part of our days anaesthetising dental lists if current plans go ahead. Two new consultants will have been appointed by the time you read this, so you can guess who will be doing the dental lists!

But then, if current plans go ahead there may not be a Yorkhill in the future and we will be simply an annex of the Southern General Hospital. At least if the paediatric intensive care transfer team gets centrally funded we will be able to go out and get a breath of fresh air.

We remain as ever naively optimistic.

INVERCLYDE Moira Simmons

We have survived another year of reorganisation. In fact we have reached our full complement of consultants.

We were pleased to welcome back Bob Campbell to the West of Scotland after his long stint in Hong Kong. However, the status quo never lasts long. Fiona Munro is expecting a second baby, Om Maini is due to retire and, with international workload reviews, we decided we needed to raise staff levels over all grades.

Anaesthesia Day was a very low key affair. Jo Robson (an SHO here at the time) very diligently & enthusiastically gave away most of our stickers. An ODAs suggested a good interpretation for the hand logo - it was meant to represent an anaesthetist throttling a surgeon. Don't know where he got that impression? Certainly not here!

They have not yet decided to reorganise the theatre coffee room - please don't tell them it has the nicest view from the hospital!

ROYAL ALEXANDRA Barbara Scorgie

With the retiral of the "Old Man" David Steel, a chapter in our history sadly drew to a close.

However a new dawn beckoned and we have appointed two new consultants, both from the Victoria Infirmary in Glasgow. Malcolm Smith focuses on Acute Pain & Obstetric Anaesthesia, while Robert Simpson has interests in Intensive Care Medicine & Education.

We are delighted to welcome fresh new talent to our team as we face a world of Clinical Governance & Revalidation with some reservation. We have a new Department Chairman, Jacqueline Orr - we wish her well for what should be an interesting term of duty.

For the first time ever we combined forces with the Surgeons in what's now come to be known as "The Battle for ICU & HDU". This involved some very hard negotiation with management and "A Last Stand Approach" when it became evident that there was nowhere else to go. Fortunately a tense situation was resolved with minimal time left to "Meltdown". As a result the RAH now has a fully funded Intensive Care Unit staffed with dedicated medical & nursing staff and a new HDU in the care of the surgeons. Both developments are long overdue but now function well, greatly improving patient care for the people of Paisley.

The Division is ever increasing in size, but like all others in Scotland we will face a difficult time ahead with implementation of the New Deal on Junior Hours. How training will be affected by this, married with Working Time Directive regulations for Consultants remains to be seen. However our trainees continue to do well in examinations and there is no shortage of people wanting to join our ranks.

VALE OF LEVEN Bill Easy

Every year brings changes, and we have certainly had our share of the general NHS disruption. Some things have not changed & our Consultant complement remains (in order of longevity) Alastair Cameron, Geoff Douglas, Bill Easy, Adrian Tully & Tim Barber.

Our two Research fellows sadly moved on - Rachael Hutchinson back to the rat race (Hammersmith) and Anne Troy to altogether greener climes (Galway). Bobby Brennan is also returning to the Emerald Isle having been here for several years. George Kashoulis & Eleanor Guthrie continue as staff grades, Lynn Campbell joined us from Edinburgh as research fellow and Roland Black comes to us in a similar capacity from Yorkhill.

We were active in the Loch Lomond Dragon Boat Races which raised £40,000 for local charities; Geoff, despite being C.D., continues his motor sporting activities & organised the *Daimler Club* run to Switzerland. Alastair has been honoured with the Presidency of the Glasgow & West of Scotland Society but still finds time to keep bees & organise the hospital ski-trip. Bill continues as newsletter editor on the Scottish Intensive Care Society council and still tries (unsuccessfully) to make money out of farming. Adrian has probably had the most successful year in that he has ceased to be Clinical Director and his pipe band won its class in the Scottish, British & European Championship.

We anticipate an expansion in HDU & ITU beds & hope the extra workload won't completely annihilate our extra-curricular lives!

CROSSHOUSE Roger White

One division has become two (North based here & South at Ayr) to allow the two functioning departments to remain functional (I think that I should probably get more as well!) Jane Chestnut is Chairman and Stephen Laurie is Hon. Secretary.

Hugh Neil (SpR from the Western) was appointed a consultant and we look forward to his arrival. Associate Specialist Kastori Hegde retired after more than 20 years valuable service.

Another great loss to the department was Sheila Macleod who retired after many years' contribution not just to anaesthesia but to the whole of Arran. Our best wishes go to them all for a long, happy retirement.

Once again the much anticipated move of the Maternity Unit from Irvine to Kilmarnock has been delayed by politicians, but we do have a new emergency theatre at the Maternity adjacent to the labour ward. The trip along a corridor & up in the lift was always fun with a cord prolapse!

The big news is that we're about to move into a new suite of offices (perhaps we should try to get out more!) Instead of one office between 15 consultants, 3 Staff Grades, 7 SHOs & 2 SpRs, we'll now have five (still no extractor fans though!) We hope to get the phones & furniture next year!

AYR (Gangland) Iain Taylor

All was not well in mobland. The territories of the *Northsiders* (Crosshouse) & the *Coastal Gang* (Ayr) had been joined together after a ruling by the county boss (Stephen *"Fourtoes"* Greep). The mobster placed in charge was Alistair *(The Loon)* Michie but *Fourtoes* wasn't giving *The Loon* a big enough share of the take so the *Coastal Gang* were bootlegging alone most of the time.

The Loon was ably supported by *Big Mama Jane* (Jane Chesnut) who ran the *Northsiders'* bordello, though the callgirls & gigolos (Trainees) often complained they were sent to the rancid opium den (Maternity Hospital) too often when they should be being taught how to turn a trick closer to home. The *Northsiders* books were cooked by *Numbers* (Chris Hawksworth) as no-one wanted to end up the wrong side of the I.R.S. like Capone.

The *Northsiders'* still was run by a few hardnosed characters who'd survived more than one street shootout. There was *Ferret* (Stan Zimmer), *Heels* (Bob Young) & *The Mick* (Terry Miller). A younger gangster, *Smiler* (Stephen Lawrie) showed great promise in the business of "persuasion". *Ferret* & *The Mick* were experts at mugging & armed robbery while *Heels* had worn out his first two Molls and was now working on the third.

The *Coastal Gang* was led by *Hairs* (David Ryan) with his trusty lieutenants *Knuckles* (Iain MacDiarmid), *Smoocher* (Robbie McMahon) & *Tache* (Ken MacKenzie). This is a formidable team. *Hairs* formerly ran with a gang from Wales, *Knuckles* is never far from settling fights the traditional way and *Tache* could teach dagger technique to Brutus.

They all knew to step aside from *Bullets* (Iain Taylor), however, because he never used the safety catch on his Tommy-Gun and was forever blasting holes in the roof of the Oldsmobile. The newest girl on the coast, *Lips Jackson* (Ruth), was quietly able to get all the answers she needed by applying electrodes to sensitive body parts (ECT).

The current cause of tension is who has the rights to protection money for Monkton Lodge burnt down in previous "negotiations" & currently under reconstruction. Blackmailing the builders by introducing "union problems" has always been very profitable.

Maybe one day *Tache* will make up with *Mick*, *Ferret* step out with *Knuckles* & *The Loon* will lead the united Ayrshire gangsters to dominate the entire Southwest side.

Maybe. Just maybe.

DUMFRIES David Bennie

Adeline Murray (Ad to her friends), our much respected Secretary, has retired. Our thanks, gratitude & best wishes go with her for the future.

We have also seen the departure of two others - James Palmer, such a driving force while here has been lured back to big-city life to take a lead role in setting up a new day case unit in Salford. Jane Timperley, having obtained full Fellowship as a Staff grade, has entered SpR training in Leeds to obtain CCST. She's been quickly replaced by David Ballingall who already has his FRCA & wanted to move back to Scotland.

As part of a fundamental expansion/restructuring recommended by Dr. Willie MacRae in his most helpful report to our Health Board two years ago, we have recently achieved our target number of 13 consultants.

We welcome Vivien Edwards, who will be joining Ron Meek to deal with chronic pain, Wayne Wrathall who has a special interest in intensive care medicine and James Neil who takes the lead role in Obstetrics anaesthesia.

The "new build" Maternity/Day Case unit is taking shape alongside the main D&GRI building and its remarkably quick progress is very visible from the theatre window - the only one which itself will disappear when the new build docks. We are now fully funded to open a separate HDU on the surgical floor of the main hospital and this should be in full swing when this report is published. So it's all go in the Southwest!

KIRKCALDY Callan Wilson

With changes in Fife, over a year ago now, to our Acute Trust, incorporating Queen Margaret Hospital, the Victoria & Forth Park Maternity, it was anticipated that some progress would have been made in rationalising acute services. The necessity of Maternity being on an acute site has been debated for over 20 years, but sadly we are no further forward under the new management and indeed the debate seems to have gone cold.

Our problem in Fife is shared by many - we try to cover too many sites with too few staff. Recently this was compounded by having inexperienced junior staff and vacancies. This necessitated consultants being resident on-call & we certainly saw an increased "out of hours" commitment.

Spring saw the opening of 4 official surgical HDU beds, which certainly relieved the pressure on our 4 ITU beds and with a 20-bed ward re-opening, we may just survive a winter crisis.

June saw the retiral of Arthur Davis - he'll be greatly missed. At the time of Arthur's appointment we were able to increase consultant input into Forth Park and in the few years he was with us he transformed obstetric care. The epidural rate, for example, increased from 7% to 20% - no mean feat considering the entrenched attitudes. He established continuous audit and introduced protocols & guidelines which helped greatly in streamlining labour ward care. We wish Arthur & Barbara every happiness in their new retirement home near Pitlochry.

Maintaining our tradition of sexual equality, we appointed another lady! Kaush Muralidharan joined our department.

We have just survived our College visit. Apart from sharing our concerns about Forth Park being a remote site, we received a good report overall with a recommendation that we should have three additional consultants! How long before we work shifts?

DUNFERMLINE Halina Anderson

We have had several staff changes this year. One of our stalwart Staff Grades Farida Rahman, has retired. It's never easy to replace someone who is happy to do endless urology lists without a word of complaint & we'll miss her cheerful smile & colourful saris.

Her replacement appears equally uncomplaining and has added value in that he is a computer buff who seems permanently welded to his lap-top. He will be awfully useful to us old geezers who've never quite come to terms with the fact that a mouse is no longer a wee, sleekit, courin' timorous beastie. His name is Grant Forrest and we give him a warm welcome.

Keith Birkinshaw retires shortly. Keith is part of the fabric of the building and will leave a terrible gap when he's gone. He is famous for his mildly eccentric habit of wandering round the hospital in the shortest of shorts (an alternative *Prozac* for patients which renders premeds unnecessary), and also for his encyclopaedic knowledge of anatomy. He can find any nerve in the body and introduced the Psoas block (unkindly called the Sore-arsed block by a cynical ODA) into our department. We've made sure that he is the only one who can do it, which gives us a great excuse to palm off all ASA4 NOFs onto him. What will we do when he's gone?

Ines Boyne joins us soon. She started anaesthetics here 1992-ish - seems like yesterday - now she's coming back as a consultant! We must have done something right! She's steadfastly refused to wear ultra-short shorts, to the eternal disappointment of my (male) consultant colleagues, but since it wasn't in the job description, we have employed her anyway. Ines will be a great asset and we look forward to her arrival.

John Emery-Barker remains Clinical Director for the time being, but threatens to step down in April, so the contest for the crown will no doubt commence soon. One thing's sure, it won't be me - been there, done that, got the ulcer! Everything else is the same as ever: massive deficit, nae beds, a looming winter crisis - but then we have to have something to grumble about!

STIRLING Crawford Reid

There have been no changes in senior staff within Forth Valley.

We are still waiting to hear plans for our acute services, but the initial ludicrous suggestions were hard to take seriously.

Congratulations go to Sonia McKinlay, Negandra Vemuri & Sabu James for passing the Fellowship and to John Luck & Andy Morrison for passing the first part.

National Anaesthesia Day was marked by inviting local school children - they were given information about anaesthesia as a specialty, along with poster presentations in the hospital foyer.

PERTH Duncan Forbes

While consultant personnel remain the same, change (or the prospect of change) seems to be predominant in our daily lives.

Despite being integrated into a Tayside-wide Trust, there remains considerable uncertainty over administrative arrangements in the enormous critical care directorate. Although the main dynamic influence in the N.H.S. is commonly recognised to be inertia, the complexities of the new organisation (and I use the word advisedly), in combination with a budget crisis, have threatened to paralyse a previously successful service.

Having spent months sharpening our crossword pencils as lists were axed to save money, we're currently responding to crisis meetings to find extra capacity required to prevent waiting lists from escalating.

Arthur Ratcliff is our Clinical Leader, under Clinical Group Director Rob Murdoch - erstwhile PRI surgeon & Associate Medical Director. Mike Bell became heavily involved in the Acute Services Review & chairing our Medical Staff Committee so relinquished his College Tutor role to Duncan Forbes.

Cliff Barthram & Peter Coe continue to build up the chronic pain service. Paediatric anaesthesia (under three) & most major trauma has been centralised to Dundee. We may be moving to a new combined ITU/HDU/CCU in 2001.

Bicycles remain a favoured mode of transport (no merit awards out here in the sticks!) the tropical fish flourish and the younger consultants continue to breed - Ewan Ritchie & Michael Forster both giving lie to the old adage that cycle shorts are bad for your sperm count! Congratulations and welcome to Emma and Gregor, respectively!

NINEWELLS John Colvin

Greetings from Dundee. It has to be said that this has not been our easiest year. In common with many, we are experiencing problems of change associated with Trust reconfiguration, new management & directorate structures. In addition, Tayside had a major budget deficit, which resulted in requests to cut elective working to destabilise the waiting lists, followed by requests for ad hoc waiting list initiatives to further imbalance the budget.

We have lost several consultant members throughout the year. Without doubt the most tragic & unexpected death of Tom Houston in August has had a profound effect on us all. Tom is sadly missed throughout & beyond the hospital.

Iain Gray decided to hang up his management boxing gloves to pursue his many other interests of family, cruises, choral & golf. Best wishes to Iain in this; hopefully progress will be made on the handicap. We look forward to his continued input & interest to the SSA in the future.

Mel Milne also decided that the lure of retirement was impossible to resist - we wish him all the best with his gardening, music & hill-walking. After a short spell here Frank Mackay was last seen heading in a southerly direction towards pastures new.

It is with pleasure that we welcome Fiona Cameron, Phil Lacoux, Barry McGuire & Justine Nanson as new consultants and look forward to consolidation of the Chronic Pain Service with new appointments early in the new year.

We have also seen major changes at senior trainee level with Ken Barker, Dan Burke & Kush Muralidharan taking up consultant posts in Inverness, St. Johns & Kirkcaldy. Dietmar Hartmann is now a chronic pain fellow down in Bath; Alistair Baxter continues to develop his paediatric expertise in Edinburgh, Philip Bolton is completing his CCST at Yorkhill and Steve Cole is our new SpR in Intensive Care Medicine. Shona & Phil Neal both got clinical attachments in Melbourne, Niall Purdie took up a research fellowship in Glasgow and Lindsay Donaldson is seconded to the Liver & Intensive Care Units in Edinburgh Royal.

We welcome several new SpRs, Ross Clarke, Craig Cumming, Eleanor Morris, Jonathan Whiteside, Subramanian Manimaran, Philippa Armstrong (LAT) and Colin Moore has taken up post as *Astra* research fellow with Professor Wildsmith. Unusually we have had little movement at the SHO stage with only two appointments, Hugh Rorrision & Kate Whiteside.

Ninewells' contribution to National Anaesthesia Day, admirably orchestrated by Willie McClymont, managed to reach both local & national media. It must be confessed that several senior members of the Department spent the day on prior engagements involving the chasing of a white ball across the countryside.

I am pleased to note the continuing presence of the Dundee mafia among the offices of the SSA with Farquhar Hamilton about to become President. As a long-term supporter & contributor to the Society, he is most surely worthy of this honour.

STRACATHRO Ian Grove-White

Last year I reported on insecurity facing us in Angus - little has changed. Some surgical & orthopaedic presence seems assured and doubt still hovers over its nature & complexity; but for the immediate future it is certain to based at Stracathro. Charlie Allison is part of the Acute Services Review team and we're certain that our corner will be well fought.

Meanwhile our linked department in Dundee has been under great pressure - at one stage they were six consultants below establishment. Most of us helped out by undertaking additional sessions down there when we could. With new appointments, things should settle soon.

As you should already be aware from reading his article, Donald Thomas attended the World Congress in Montreal.

I retired in August but my post was impossible to advertise with the hospital's future uncertain. I returned full-time in October, pending implementation of the Review, (which grinds on & on) though Charlie is now Clinical Leader. It's likely I'll be here to write a report next year - perhaps I'll have news by then . . .

ABERDEEN Kathleen Ferguson

Along with an increasing workload comes an increasing workforce - but the two don't often match. We've seen numbers swell with six new Consultants - welcome to Andrea Harvey, Vivek Kulkarni (from the University), Gina Anderson, Rona Carmichael, Nanda Kumar & Brian Cuthbertson (Senior Lecturer). Some posts are to cope with junior doctors hours while others cover ICU expansion from 8 to 12 beds & 4 more HDU beds.

This time the horse & cart are in the right order as the new ICU opens in the summer. Well done strategic planning! The new children's hospital was delayed due to the wise man realising it was best to build his house on the rocks and not upon the steam pipes carrying heating around Foresterhill - building starts soon.

We have been busy exporting prime Aberdeen trainees South. We wish success to Trevor Armstrong in Cardiff & John Hunter in Macclesfield. Despite swathing cuts in SpR numbers, trainees remain up-beat & have enjoyed good exam success (well done!) They are also expanding further into the bounds of research. Brian Cuthbertson graduated M.D. & Nigel Webster has three trainees researching with the goal of a higher degree. Alan Thomson secured a University teaching fellowship, allowing him to gain experience in teaching, assessment & curriculum development and receive a certificate in medical education.

Judith Blaiklock retired in time for a good season of tennis - perhaps now the weather is not so good, she'll return to help with "extra" sessions. Pete Shirley left with hair-shirt & tin helmet for climes possibly colder, wetter & more miserable than Aberdeen - we are not able to specify more (ref. Shayler).

Future challenges include appraisal, assessment, revalidation & conjuring with the European working directive. If anyone out there has the blue-print, might they let us know? Finally, what happened on the 20th May 2000 you ask? All those *pro* will remember and all those *con* will have expunged it from their consciousness. Which one are you?

DR. GRAY'S, ELGIN Colin McFarlane

We remain the fittest, best-looking department in our hospital, a fine example of a desperate mid-life crisis syndrome! Three of us cycle to work (sometimes underwater depending on the flood status of the Lossie) and four of us ran in the Moray 10K race this year - Iain Macdonald the fastest, Ian Harper wearing the rudest pair of shorts and Chris Taylor & I did very well in the ladies race!

We were pleased Janet Trythall returned from her Atlantic Tall Ships *almost* in one piece (other than her ribs). George Duthie stays mean & lean by jogging the corridors in his role as our hospital Clinical Co-ordinator.

We continue to transfer patients across the country in search of ITU beds and our resuscitations tend to be based on "deary-me, where are we going tonight?" Thanks to all who accepted our patients. Our isolated position is no more, thanks to a VIDEOLINK, but I think technology has a little way to go on this one.

INVERNESS Ian Johnston

Another year goes by with more management changes but "The Firm" continues to grows from strength to strength. We welcome back Ken Barker as consultant - we obviously failed miserably to put him off as an SpR.

Reorganisation continues. While Caithness & Fort William will become self-contained Directorates, the Anaesthesia Dept. is to be swallowed up by the Surgical Directorate. Worried? Not a bit of it - we'll manage them quite well!

What is more disconcerting is that we are to be split from ITU, which joins Medicine. Rumour has it that the ITU consultants are to be awarded honorary FRCP's (Five o'clock Retire but Continue to Procrastinate).

Skye continues to be a thorn in management flesh and although we believed that acute surgical services had been withdrawn & the hospital transferred to the Primary Care Trust, the bill for the anaesthetic locum still distorts our staffing budget. Rumours abound from Caithness that the Home Guard is out to defend their acute services although we have heard no suggestion that they are under threat - interesting times!

Howard Spenceley (presumably as a first step towards approaching retirement) stood down as Clinical Director to make more time for culinary & nautical activities. Await a new BBC2 programme *"Spenceley Sauteing with Sauvignon at Sea"* complete with beard & souwester!

By chance John May was indulging in a new hobby of testing the effects of Highland rabbit holes on the lower limb. While excused from clinical duties due to an environmentally unfriendly "stookie", he hopped into the vacant management role upon which he now thrives. To continue on the sickness theme, Suzie Dempster was absent for most of 2000 due to a recurring ailment - we all wish her a complete recovery following surgery.

Lastly, congratulations go to our overworked, underpaid convener Nial Hennessy (& Karen) on the birth of their second son Kieran. These occasions are always special to Nial, as a good reason to avoid the hospital & let the females get on with "women's work." We are also delighted to say that our last-ever (?) R.E.A. Isobel Mackenzie married David last Easter - our very best wishes to them all!

THANKS AGAIN TO OUR REGIONAL SCRIBES FOR ALL THIS INTELLIGENCE
WE LOOK FORWARD TO HEARING FROM THEM AGAIN NEXT YEAR

NEW CONTRIBUTERS

SHELAGH WINSHIP, ALISTAIR McKENZIE, WAGIH ANTONIOS, DONALD THOMAS & NICK TOWNELL

8500

Anaesthesia ventilator

It's here. User definable, intuitive and advanced anaesthesia ventilation to take you confidently into the 21st century.

Offering individually tailored and retrievable settings, ergonomically designed tilt screen multi-lingual display and the most comprehensive range of functions, the 8500 ventilator represents the criterion by which all others will be judged.

It simply has everything you need for safe, accurate, technologically advanced anaesthesia ventilation for years to come.

And with Blease behind it you can be assured that the 8500 will also be both cost-effective and consistently reliable.

For anaesthesia ventilation that leads where others aspire to follow now is the time to catch up with **Blease**

Inspired thinking in healthcare

SIMV WAVE-FORM PAW DISPLAY
USER-DEFINABLE SETTINGS Electronic PEEP
ADULT AND PAEDIATRIC MODE INTEGRATED SPIROMETRY
Sigh Function FRESH GAS FLOW COMPENSATED VOLUME VENTILATION
RESPIRATORY LOOP COMPARISON INTEGRATED O_2 MONITORING PATIENT DATA MANAGEMEN
GRAPHIC DISPLAY AND TRAK-WHEEL CONTROL MULTILINGUAL DISPLAY
COMPLIANCE COMPENSATION Pressure Support INSPIRATORY PAUSE
PRESSURE CONTROLLED VENTILATION
CONTROLLED MANDATORY VENTILATION

Distributed in Scotland by R L Dolby and Co Ltd
Monitor House Kerse Road Sterling FK7 7RZ
Tel: 01786 446640 Fax: 01786 446630
e-mail: sales@dolby-ltd.co.uk

Blease Beech House Chiltern Court Asheridge Road Chesham Bucks HP5 2PX England
Tel: +44 (0)1494 784422 Fax: +44 (0)1494 791497 e-mail: sales@blease.com www.blease.com