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CORRESPONDENCE
Cohen AM, Fairer JG, Knox G, Ravalia A, Semmens MA, Zuck D
Why take the risk?

Equal efficacy & lower toxicity than bupivacaine

Chirocaine (Levobupivacaine Hydrochloride) Prescribing Information.

Presentation: Three strengths are available: 2.5 mg/ml, 5.0 mg/ml and 7.5 mg/ml of levobupivacaine as levobupivacaine hydrochloride. Each strength is available in 10ml polyethylene ampoules in packs of 10.

Indications: Adults: Surgical anaesthesia - Blocks, e.g. epidural (including for Cerebral aneurysm), intrathecal, peripheral nerve block - Infusion - local infiltration, paravertebral blocks in spinal surgery. Pain management - Continuous epidural infusion, single or multiple bolus epidural administration for the management of pain especially postoperative pain or labour analgesia. Children: anaesthesia (Bougienage/Radiographic blocks).

Dosage and Administration: The precise prolongation will depend upon the procedure and individual patient concerned. Caudal separation before and during injection is recommended to prevent intravascular injection. When a large dose is to be injected, e.g. in epidural block, a test dose of 0.5 ml levobupivacaine with adrenaline is recommended. An inadvertent intravascular injection may then be recognized by a temporary increase in heart rate and accidental intravascular injection by signs of a spuck block. Administration should be repeated before and during administration of further dose, which should be injected slowly and in incremental doses, at a rate of 7.5 - 30 mg/min, while closely observing the patient's vital functions and maintaining arterial contact. The recommended maximum single dose is 150 mg. The maximum recommended dose during a 24-hour period is 400 mg. For postoperative pain management, the dose should not exceed 18.75 mg/hr. For Cerebral aneurysms, higher concentrations than the 5.0 mg/ml solution should not be used. For labour analgesia by epidural infusion, the dose should not exceed 12.5 mg/hr. In children, the maximum recommended dose for analgesia (Bougienage/Radiographic blocks) is 1.25 mg/kg/hr.

Contra-indications: Patients with a known hypersensitivity to local anaesthetic agents of the amide type, intravenous regional anaesthesia (Bier's block); patients with severe hypertension or cardiovascular shock, and use in paravertebral block in obstetrics. The 7.5 mg/ml solution is contra-indicated for obstetric use due to an enhanced risk for cardiotoxic events based on experience with bupivacaine. There is no experience of levobupivacaine 7.5 mg/ml in obstetric surgery.

Precautions: Spinal anaesthesia with any local anaesthetic may cause hypotension and hypothermia. All patients must have intravenous access established. The availability of appropriate fluids, vasoconstrictor agents, hypothermia and anticonvulsant properties, myocardial Langendriek, atropine, adrenaline and ephedrine equipment and expertise must be ensured. Levobupivacaine should be used with caution for regional anaesthesia in patients with impaired cerebral vasoregulation function e.g. strokes, cardiac arrhythmias and in patients with low blood volume or with reduced blood flow e.g. irradiation or chemotherapy. Interactions: Methohexital and levobupivacaine may be affected by (VP4)4 glutathione eg. intravenous and CYP2A glutathione eg. methotrexate. Levobupivacaine should be used with caution in patients receiving antithrombin agents with local anaesthetic activity, e.g. aspirin, or Class III anti- arrhythmias since their toxic effects may be additive. No clinical studies have been completed to assess levobupivacaine in combination with adrenaline.

Side-Effects: Adverse reactions with local anaesthetics of the amide type are rare, but they may occur as a result of pre-existent or unrecognised intravascular injection and may be severe. Accidental intravascular injection of local anaesthetics can lead to very high plasma concentration possibly with overdose, severe hypotension and loss of consciousness. The most frequent adverse events reported in clinical trials irrespective of causality include hypotension (22%), nausea (13%), arrhythmia (11%), postsynaptic pain (9%), vomiting (6%), back pain (6%), fever (6%), dizziness (6%), nausea (6%), headache (6%). Other side effects include: CNS effects: numbness of the tongue, light-headedness, dizziness, blurred vision and muscle twitching followed by drowsiness, somnolence, unconsciousness and possible respiratory arrest. CVS effects: decreased cardiac output, hypotension and ECG changes indicative of either QRS block, levobupivacaine or ventricular tachyarrhythmias that may lead to cardiac arrest. Neuromuscular damage is a rare but well-recognized consequence of regional and particularly epidural and spinal anaesthesia. This may result in impaired areas of paralysed or anaesthetized, motor weakness, loss of sphincter control and paraplegia. Rarely, this may be permanent. Use in Pregnancy and Lactation: Levobupivacaine should not be used during early pregnancy unless clearly necessary. The clinical experience of local anaesthetics of the amide type including bupivacaine for obstetric surgery is extensive. The safety profile of such use is considered adequately known. There are no data available on effects of levobupivacaine on human breast milk. However, levobupivacaine is likely to be transmitted to the mother's milk, but the risk of effects of the child is not. The risk of toxicity may be delayed. Systemic absorption reactions following intravascular accidental intravascular injection reported with long-acting local anaesthetic agents involve both serious CNS and CVS effects. Special Storage Conditions: No special storage precautions for the closed ampoules. Once reconstituted, use immediately. Legal Category: PBS. Marketing Authorisation holder: PL 0037/0039-032. Basic NHS Price: 2.5 mg/ml pack: £16.60, 5.0 mg/ml pack: £39.30, 7.5 mg/ml pack: £69.10. Further information is available on request from Abbott Laboratories UK, Abbott House, North Road, Maidenhead, Berkshire SL6 8DE. P/71/1.001. Date of Preparation: March 2002. Reference: 1. Beebe D & Baudoir J. Current Anaesthesia and Critical Care 1999; 10: 252-267. K002803691

ABBOTT ANAESTHETICS operating with care
Sevoflurane Prescribing Information. Presentation: Ambient bottle containing 250ml sevoflurane. Indications: For induction and maintenance of general anaesthesia in adults and paediatric patients for inpatient and outpatient surgery. Dose: MAC values decrease with age and the addition of nitrous oxide (see Summary of Product Characteristics). Induction: In adults up to 5% sevoflurane usually produces surgical anaesthesia in less than 2 minutes. In children up to 7% sevoflurane usually produces surgical anaesthesia in less than 2 minutes. In adults 8% sevoflurane can be used for induction in unpremedicated patients. Maintenance concentrations range from 0.5—3%. Elderly: lower concentrations normally required. Administration: Deliver via a vaporizer specifically calibrated for use with sevoflurane. Induction can be achieved and maintenance sustained in oxygen or oxygen-nitrous oxide mixture. Contra-Indications: Sensitivity to sevoflurane. Known or suspected genetic susceptibility to malignant hyperthermia. Precautions: For use only by trained anaesthetists. Hypotension and respiratory depression increase as anaesthesia is deepened. Malignant hyperthermia. Experience with repeat exposure is very limited. Until further data are obtained, sevoflurane should be used with caution in patients with renal insufficiency. Levels of Compound A (produced by direct contact with CO2 absorbents) increase with temperature; increase in anaesthetic concentration; decrease in gas flow rate and increase more with the use of Baralyme rather than soda lime. Interactions: Potentiation of non-depolarizing neuromuscular blockers. Similar to isoflurane in the sensitization of the myocardium to the arrhythmogenic effect of adrenaline. Lesser concentrations may be required following use of an N2O anaesthetic. Sevoflurane metabolism may be induced by CYP2E1 inducers, but not by barbiturates. Side-effects: Dosage dependent cardio-respiratory depression. The type, severity and frequency of adverse events are comparable to those seen with other inhalation anaesthetics. Most adverse events are mild to moderate and transient: nausea, vomiting, increased cough, hypotension, agitation and bradycardia. Hepatitis has been reported rarely. Convulsions may occur extremely rarely, particularly in children. There have been very rare reports of pulmonary oedema. As with other anaesthetics, twitching and jerking movements, with spontaneous resolution have been reported in children during induction. Patients should not be allowed to drive for a suitable period after sevoflurane anaesthesia. Use in Pregnancy and Lactation: Use during pregnancy only if clearly needed. It is not known whether sevoflurane is excreted in human milk - caution in nursing women. Overdosage: Stop sevoflurane administration, establish a clear airway and initiate assisted or controlled ventilation with pure oxygen and maintain adequate cardiovascular function. Special Storage Conditions: Do not store above 25°C. Do not refrigerate. Keep cup tightly closed. Legal Category: POM. Marketing Authorisation Number: PL 0037/0736. Basic NHS Price: £12/00. Further information is available on request from Abbott Laboratories Ltd., Abbott House, North Road, Maidenhead, Berkshire SL6 4XE. Ref. Pi/12/009. Date of preparation: October 2007. Item code: A93870200706.

ALL AGES
ALL STAGES

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The views and opinions expressed in the Bulletin are solely those of the individual authors, and do not necessarily represent the view of The Royal College of Anaesthetists
Well, here I am in the hot seat, feet just about under the desk, and recently returned from our annual Regional Advisors and College Tutors meeting in Manchester. Once again, it was superbly organised by our Lead Tutors, John Peacock and Fiona Dodd, and it was she, in conjunction with Karen Sayer and the team, who made everything run so smoothly. The social highlight was the annual dinner in Manchester Town Hall, a magnificent Neo-Gothic building which has no doubt been earmarked for their Regional Assembly! We tried and, I hope, succeeded in promoting vigorous discussion and answering many of the questions raised, about training and wider issues. I have always found the RA’s (led by John Currie and Jane Pateman) and Tutors meeting to be a great barometer of anaesthetic opinion, from an extremely well informed and motivated group of Consultants. The Tutors, Regional Advisors and Programme Directors are all crucial to delivering training on behalf of the College and beaver away, often in an unsung way, on behalf of us all and the future of anaesthesia. We are eternally grateful for their hard work and support, without which the training responsibilities of the College just could not be delivered. John Currie and John Peacock step down from their lead roles this year, to be replaced by Bernard Riley and Karen Beacham respectively and so a big thank you to them both for all their hard work, enthusiasm and endless patience.

Another great source of opinion for me is talking on the Specialist Registrar management programme at Keele. After dinner and ‘with the gloves off’, I am often given full and frank opinions about what is right and wrong about anaesthesia today and what we should be doing about it. I would like to reassure those who wake up with a headache the next morning, wondering what they said, that I find this invaluable! The last thing that we need to be doing at the College is pursuing strategies and ideas, which are contrary to the wishes of our anaesthetic colleagues, both trainees and career grade staff. This particular group of anaesthetists not only represents today’s trainees, but also the Consultants of tomorrow and their opinion is crucial if we are to develop the speciality in a way which is in tune with their expectations. As I’m often told, ‘it’s alright for you, you’ll be retired in a few years, but I’ve got 30 more years in anaesthesia’.

Correcting misinformation and misconceptions
One of the most frustrating things for anyone representing the speciality in whatever role, is to listen to, or read other people’s interpretation of initiatives with which the College has been involved, knowing them to be at best inaccurate and often actually wrong. Worse still, they can easily be misleading and therefore confuse others, whom we have already tried hard to inform and keep in the picture. What is sometimes difficult to decide is whether such reports and criticisms are deliberately slanted out of pique, or journalistic licence, to create sensational headlines or whether it is our fault as a result of a poor communication strategy? Two issues have dominated people’s minds during recent weeks, both of which would benefit from some explanation to counter misinformation from other quarters.

Colour coding of syringe labels in critical care areas
This issue has recently generated some comments, largely, I’m afraid, from people and organisations unconnected directly with anaesthesia. What most fail to appreciate is that all we have been trying to do, in conjunction with the Association, the Faculty of Accident and Emergency medicine and the Intensive Care Society, is to unify what was a very uncoordinated and ad hoc system, particularly for the benefit of those who move between hospitals and around the country. The problem, which we were asked to address, was that there were at least four different colour coding systems in use in the UK. Trainees in particular, who move between regions, were undoubtedly at risk from making errors and this was of great concern to us.

We have not introduced a new system but merely improved the existing, simple labelling system, which has been used for years, has stood the test of time and within which we simply wished to unify and standardise the colours. Since many trainees also go abroad to Australasia and North America, it seemed sensible to implement the same international colour coding system as is used there. We contacted manufacturers at least four months in advance, to ensure that they could meet the demands of changeover and were prepared for it.

What has also not been appreciated, largely by non-anaesthetists, is that we have not tried to introduce colour coded drug labels, with all the necessary details of volume, concentration, dual signatures and audit trails, but merely to standardise the existing method of syringe labelling, with
a simple colour code to identify the group of drugs used, which has up until now been largely confined to anaesthetic rooms and anaesthetists. While doing so we felt it important to involve other critical care areas, including intensive and high dependency care and A&E departments. Perhaps we should have stuck to anaesthesia!

We appreciate that there will need to be increased vigilance at the time of changeover and that this needs to be managed sensibly. We did not wish to appear too prescriptive about how the changeover should be managed, feeling that this was an issue for individual departments and hospitals to address at the most appropriate time for themselves. Nevertheless, we feel that we have worked hard to address what was a significant risk issue for many anaesthetists and particularly trainees. What needs to be clearly understood is that we are not talking about full-scale ‘primary’ drug labelling with colours, of which many pharmacists disapprove. It is the ‘secondary’ labelling of syringes, which are drawn up by the anaesthetist for individual use, as and when required, often in an emergency situation and the colour simply distinguishes between the groups of drugs being used. It is still vital to read the drug name on the label. So I hope you are convinced that in fact this has been a major joint initiative, led by the Association and the College and undertaken with a lot of consultation, which has been received with enthusiasm and expressions of ‘thank goodness’ and ‘about time’ from many of our colleagues. Please see the RCA website at: http://www.rcoa.ac.uk/dload/Syringe_Labels.pdf for further details.

**Non-medical roles in anaesthesia – Anaesthesia and Critical Care Practitioners (ACCP’s)**

Despite our best efforts, considerable confusion still exists about the pilot work being undertaken on the use of non-medically qualified staff in anaesthesia, particularly from articles in places such as the Nursing Times. So at the risk of boring some of you, here is how things developed and what is actually happening!

As part of their workforce development initiatives, the Changing Workforce Programme of the NHS Modernisation Agency, received a number of submissions from interested Trusts to pilot the use of non-medically qualified personnel in the delivery of anaesthetic services. Through their representation on the Board of the Modernisation Agency, the College felt it important, at an early stage, to be part of the consultation process of proposals for such a fundamental change in UK anaesthetic practice. This was on the basis that any developments in this area should be led by the Speciality, in consultation with the Department of Health, rather than in a fragmented and ad hoc way, by individual Trusts or Workforce Development Confederations. As a result, representatives of the College and the Department of Health’s Changing Workforce Programme undertook a series of fact-finding visits to the USA, Holland and Sweden, to gain a balanced view of the place of non-medically qualified anaesthesia assistants in the various healthcare systems. The full report of these visits is available on the College website at: http://www.rcoa.ac.uk/dload/Role_of_non-medical_staff.pdf.

The Changing Workforce Programme then approached the six sites which had expressed an interest and encouraged submissions for pilot projects. As a result of this, we are now taking forward two parallel and simultaneous strands to the project. Firstly, some of the sites will be appointing trained anaesthesia assistants from Holland, Sweden, Finland and Norway later this year, to be called visiting anaesthesia and critical care practitioners (ACCP’s). This is intended to establish their suitability for the way in which anaesthesia is delivered in the UK and should answer questions about theatre layout, supervision, organisation of lists and, frankly, whether it is an appropriate option for the NHS. The whole project will be based on the Dutch model of medically supervised anaesthesia, with one specialist anaesthetist supervising two anaesthesia assistants (ACCP’s), situated in two parallel theatres. Every induction and reversal/recovery will be medically supervised. There is no suggestion that we should be considering a CRNA style model of care or contemplating unsupervised non-medical anaesthetic practice in any way.

The second part of the project involves devising and setting up a training and accreditation programme under the umbrella of the NHS University. This broad programme is designed to have a common generic training core, but then to include not only anaesthesia, but possibly also, at a later stage, pain management, certain aspects of critical care, resuscitation, preoperative assessment, etc. Anaesthetists are spending increasing amounts of time outside theatres and the use of non-medically qualified members of the anaesthetic team should allow those anaesthetists who wish to do so, to return. At present we are only contemplating the generic training plus the anaesthesia training module.

David Greaves has been appointed by the NHSU to coordinate curriculum development, with the help of the pilot sites which are interested in this part of the project, and to ensure that this is done on a national basis. This will have to take account of the variety of potential entrants to the training scheme and how their previous experience and knowledge can be suitably credited or enhanced. Some will have good theoretical knowledge but little practical experience, while others will have a different balance. It will be crucial to devise a way of giving appropriate recognition and credit to both these areas. We envisage a wide variety of
applicants, from nurses, ODP’s, paramedics, university science graduates, etc, who by definition will have different starting skills. The word nurse has deliberately not been included in the job title since this would have implied a preconceived notion of where the main recruitment thrust would occur. We are only too aware of the current shortage of critical care nurses and would only want to train those who wished to develop their careers as ACCP’s, alongside others from a variety of backgrounds.

This is not a quick fix solution since we could not contemplate starting the training programme before September 2004. It is to be a two-year Masters course, so the first trained staff will not emerge until 2006. It may be possible to recruit additional trained staff from overseas to enhance the first phase of the project, but this would only be after evaluation of the initial pilot sites. And lest you should think that we are out on a limb, my challenge would be for you to name a College that is not contemplating training non-medically qualified staff to assist in their work – in fact, virtually everyone is doing so. The crucial factor is that, if we do not lead the way in anaesthesia, others are only too ready to take up the reins on our behalf. Coordination and a nationally agreed programme of accreditation, recognition and registration must be the cornerstone of success, but only if the project appears viable in the first place.

**Anaesthetists as managers**

The relationship between doctors and managers has recently been the subject of considerable effort and publicity. Not only was a whole edition of the British Medical Journal devoted to this but also a joint conference was organised by the NHS Confederation, which represents Trust managers, the Academy of Medical Royal Colleges and the Department of Health. Anaesthetists contribute significantly to the clinical managerial workforce in many Trusts and, with appropriate training, are well placed to do so. Since they are involved in so many areas of hospital activity, their knowledge base is large and they are accustomed to team work and making decisions.

For the sceptics among you, I would commend Richard Smith’s leading article in the BMJ, in which he clearly argues that the NHS needs both doctors and managers. He explains that many doctors, who have been brought up before the advent of multiple tiers of management, find it difficult to have the organisation of their daily lives taken out of their hands. Furthermore, a number believe that management skills come naturally to clinicians, that specific training is unnecessary and that all one needs to do is to make clear and robust decisions and abide by them. Equally, managers need to be properly informed and trained in the special nature and demands of doctors’ work and the open-ended commitment, which they make to patient care. Nevertheless both groups of staff need each other if we are to solve the numerous problems in healthcare and improve everyone’s morale and I believe that many anaesthetists have the ability to make a significant contribution.

I was discussing the dire financial position of my own Trust, together with the inevitable lack of stars, with one of our managers the other day, questioning why things had deteriorated so rapidly, from our comfortable position only a few years ago. Was it simply because too many of us, me included, were spending too much time away from our clinical commitments? The answer I received was some way away from what, I believe, is perceived nationally, namely that the overspend was attributable to two main factors, paying for patients to be treated in the private sector to meet waiting time targets and the increasing employment of agency nurses. Staff morale of course, is inevitably hit hard by these issues, since everyone feels they are working in a poorly performing or even failing Trust. In fact the Trust was commended for its clinical care and the star ratings relate to the failure to meet financial targets.

Such discussions, although depressing, are very helpful, in that they give us insight into the real world and an opportunity to raise these issues at an appropriate time when we meet with the Department of Health. Such meetings now occur frequently and although ‘running the College’ could probably be condensed into three days per week, the external organisations with which we work, such as the DoH, function on a five or even six day week, which means that the role of President, even with the support of two Vice-Presidents, is becoming almost a full-time job, if we are to contribute regularly and meaningfully to the national healthcare debate.

**And finally – Polypills and anaesthesia**

Having read what was heralded as the most significant edition of the BMJ in the last 50 years, and passed it to my wife, she is busy sourcing supplies of aspirin, statins, beta-blockers and ACE inhibitors and deciding which food products contain folic acid. Wonderful though the ‘Polypill’ may be, how will we feel about anaesthetising every patient over 55, when they are taking three different anti-hypertensives, let alone the rest? Does this automatically move everyone from ASA 1 to ASA 2, and will there be a special over 55 anaesthetic chart with all the drugs routinely printed on it?

As usual of course, anaesthesia is ahead of its time and has had ‘polypills’ for years. Some would say ketamine fulfils this role, but who remembers such recipes as the Venn
B mixture? I well recall one of my mentors mixing up his own particular cocktail of althesin, pentazocine (fortral), gallamine (to soften them up!) and an antiemetic, to great effect and administering the mixture by volume depending on age and weight. I am also reminded of the army anaesthetist demonstrating an early version of continuous intravenous anaesthesia for use in the field, from a polypharmaceutical infusion containing sedation, analgesia and neuromuscular blockade. The poor unsuspecting patient was being prepared for surgery, the drip was connected and the anaesthetist announced that he was infusing the mixture and soon Private Jones would be unconscious and completely surgically anaesthetised. The patient was towelled up, the skin prepared and just as the surgeon was about to make the incision, a voice from under the drapes said: ‘Excuse me, Sir. Permission to speak, Sir. Not asleep yet, Sir!’ Perhaps we’re not quite there yet and should stick to multiple syringe drivers!

Peter Simpson

References
1 Smith R. What doctors and managers can learn from each other. BMJ Vol.326;7390, 22.03.2003:610–611.

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**Discontinuation of Aramine Injection (Metaraminol Tartrate)**

30 July 2003

Merck Sharp & Dohme Ltd, the UK subsidiary of Merck & Co., Inc., of Whitehouse Station, New Jersey, USA, has announced the deletion of ARAMINE® Injection (metaraminol tartrate) from the MSD product range in the UK.

ARAMINE is a sympathomimetic amine (vasopressor agent) and is indicated for the treatment of acute hypotension due to loss of vasoconstrictor tone as may occur during spinal anaesthesia and as an adjunct to accepted remedial procedures.

New production of this medicine by MSD has ceased due to supply problems of the active ingredient from our authorised suppliers, which would have led to manufacturing issues. Based on current demand, ARAMINE Injection should remain available from MSD for at least the next few months.

In an effort to ensure that patients will continue to have uninterrupted access to metaraminol injection after the exhaustion of company stock in the retail chain, MSD has been collaborating with the Department of Health and the Royal College of Anaesthetists. As a result, arrangements for alternative supplies are in hand. Further details can be obtained from MSD on tel 01992 467272.

The company is taking several steps to inform doctors and pharmacists of this change, including through the relevant specialist press, a direct mailing to relevant health care professionals (including hospital pharmacists), and communications via the NHS Purchasing and Supply Agency and the Royal College of Anaesthetists.
Birth

Ten years ago, following discussions with the Chairman of the patient liaison group of another medical college. It was thought that lay people working together with anaesthetists could make a useful contribution to its work by representing the interests of patients. The timing was propitious. The changing climate in the relationship between patients and the medical profession, and the fact that other medical colleges had set up patient liaison groups helped.

Lay members were advertised for in the national press and candidates short listed for interview, (yes, apparently competition was fierce!) and the interview was surprisingly nerve wracking. So the Patient Liaison Group consisting of anaesthetists (no, I don’t think they were interviewed!), including College Council representatives and lay people was born. As new lay members we were warmly welcomed into the College but unsurprisingly I think some had reservations. The jury was out; could we make an impact or would we be a token presence?

It’s good to talk (to patients)!

So what is the Patient Liaison Group doing? We have devoted time recently to searching for a solution to a seemingly intractable problem, the issue under discussion being the paucity of time available for anaesthetists to talk to patients. We have been particularly concerned about fit patients undergoing a general anaesthetic admitted on the day of surgery because of the Government’s formula: Increased patient throughput + Admission on the day of surgery = Less time to talk to patients. The electorate is persuaded (is it really?) that the NHS is improving because the number of ‘waiters’ for elective procedures hits some dubious target. What happens to quality of care in these circumstances?

The patient arrives on the day of their surgery; time is short, even more so if the patient arrives after the list has started. There is pressure to get through the list. The anaesthetist who holds things up by going off to have a discussion with the patient may not be popular. This means that occasionally the patient’s first meeting with their anaesthetist is in the anaesthetic room. This situation is not acceptable for the patient or the anaesthetist.

General anaesthesia is a complex procedure, there are choices to be discussed, side effects to be informed about, risks to be considered. Patients may be more frightened of the anaesthetic than their operation. The experience of a side effect as common as a sore throat can scare a patient if no warning has been given. Patients should be given the opportunity for a discussion with their anaesthetist beforehand, not in the anaesthetic room; how many patients would have the courage to leap off the trolley, to say they had changed their mind? But consent cannot be valid if they have no chance of doing so!

The Patient Information Project undertaken by the Royal College of Anaesthetists and the Association of Anaesthetists has produced some excellent written information for patients but this should not be a substitute for a conversation. It should complement it and enable patients to be better informed when they meet the anaesthetist.

So how do anaesthetists feel about this? Are they more comfortable with unconscious patients and the technical challenge of keeping them safe during surgery and providing good pain control afterwards? But anaesthetists do their specialty as well as their patients a disservice if they accept the current situation. Anaesthetists are rightly proud of their skills; advances have made general anaesthesia a much safer procedure and a more comfortable experience for patients.

Dr John Snow, a London GP who pioneered anaesthesia was voted the greatest doctor of all time in a recent poll of Britain’s hospital doctors by ‘Hospital Doctor’. Why should surgeons receive most of the plaudits, when the skills of the anaesthetist are essential for their performance? With better communication patients would be aware not only of the skills of their surgeon but also those of their anaesthetist.

Discussion of this issue can produce a defensive reaction from anaesthetists, perhaps because of the unreasonable demands currently placed upon them – provision of cover for split sites, adequate supervision to ensure a safe service, high standards of care and good quality training when service demands on trainees and the New Deal mitigate against these things. As if that’s not enough, the dreaded impact of the European Working Time Directive looms! Of course anaesthetists, like doctors in many specialities are demoralised, especially when some of the ‘initiatives’ being proposed as a quick fix to problems in the Health Service risk threatening standards of care.

Preoperative assessment

The Patient Liaison Group explored the possibility of making pre operative assessment clinics available to more...
patients. We thought this would give patients the opportunity for clinical assessment and discussion about their anaesthetic in good time. However it was made clear that there are not enough anaesthetists available to run such clinics. (‘Where would we remove them from, ITU?’). The National Confidential Enquiry into Perioperative Deaths (NCEPOD) acknowledges that: ‘The involvement of consultant anaesthetists in pre-admission assessment clinics has implications for consultant workload, which must be recognised in anaesthetic staffing reviews and job plans.’

**One patient, one anaesthetist?**

Inpatients may be fortunate enough to receive a visit beforehand but how often will it be carried out by the anaesthetist who will be anaesthetising them? A survey of Italian anaesthetists showed that a vast majority thought that the preoperative visit should be carried out by the anaesthetist who would subsequently anaesthetise the patient. However, this seldom happens nowadays in Italy, even though such practice is regarded as a marker of quality and was accepted practice there ten years ago. Patients undoubtedly prefer it but how often does it happen in the UK? The RCA’s guidance on Pre-anaesthetic Care states: ‘The anaesthetist will discuss possible plans of management with the patient and explain any choices made’, also ‘The anaesthetist who will actually give the anaesthetic should visit the patient preoperatively. The assessment should take place at an appropriate time before anaesthesia and surgery to allow for adequate consideration of any problems encountered. This may be difficult in the case of some acute emergencies.’ How often can these admirable goals of the RCA be realised?

**Do patients know that anaesthetists are medically qualified?**

Surely this situation cannot be allowed to continue. Anaesthetists themselves have the right to adequate time with patients when they are conscious. No wonder consecutive MORI Polls conducted for National Anaesthesia Day have demonstrated that only around 60% of members of the public understand that anaesthetists are medically qualified. But for how much longer will the latter be true? Yes – non medical delivery of anaesthesia is on the horizon, one of the ‘straws’ being clutched at by the Government to produce more ‘anaesthetists’. How will patients feel about this? A cynic might observe that as many currently don’t understand that anaesthetists are doctors, they might not mind at all!

**Working with the College**

The Patient Liaison Group has secured two places for its lay members on the New Ways of Working in Anaesthesia Stakeholder Board. The issue of non medical delivery of anaesthesia has widely been the subject of intense debate and the presence of two independent members representing patients’ interests should be beneficial.

College visitors have been agreeably surprised to find just how effective a lay PLG member can be as part of the visiting team when a squirming Chief Executive is trying to justify not having implemented their Action Plan during a Category 3 visit!

We have responded to many of the prolific number of consultation documents which are regularly churned out and have supported the College when to do so has been in the interest of patients and public. We have pressed for adequate representation from the medical colleges on the Post Graduate Medical Education and Training Standards Board and for some lay posts to be allocated to lay members of the medical colleges’ PLGs.

There are many ways in which we are now working with the College and many topics under discussion, some of which could perhaps be considered for an article in the future.

**Can you help?**

Anaesthetists, the PLG would be grateful for your help, especially on the issue of time and communication with patients. We would welcome your views. Do you have any suggestions to improve things? Additionally, it would be excellent if some research could be undertaken on patients’ experience of general anaesthesia. Would this be something the National Anaesthesia Day Working Group could undertake? Can the ‘patient centred care’ the NHS purports to be striving for, be realised for patients undergoing anaesthesia? If there is enough evidence to demonstrate that standards of care are under serious threat, I would like to take it to Number 10 for one of those breakfast time meetings!

**Mrs Ann Seymour**

Chairman, Patient Liaison Group

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**References**

The early monoamine oxidase inhibitors (MAOIs) were developed from anti-tuberculosis drugs in the late 1950s, and were the first effective antidepressants. Inhibition of amine neurotransmitter breakdown causes accumulation at the primary sites of action, and leads subsequently (by a mechanism which remains unclear, but involves changes in receptor regulation), to an elevation of mood. However, the enzyme is widely distributed, also being important in the metabolism (in the liver and gut) of dietary and (in the liver, kidney and lung) circulating amines. Thus inhibition can cause exaggerated systemic, as well as local, responses. Hypertensive crises are possible, although the circulatory response to endogenous catecholamine release is not increased because termination of action is by re-uptake into nerve endings. Hypotension can occur because enzyme inhibition leads to the production and release of false neurotransmitters. Other effects relate to inhibition of other enzyme systems, including those which metabolise a wide range of drugs, including hypnotics, analgesics and sedatives. Thus it is not surprising that numerous reports of extensive co-medication, or by other clinical circumstances identified as the cause of adverse reactions, and the potential for adverse drug and dietary interactions, led to a decline in use.

However, the situation has been changed over the last decade by the introduction of a new class of drugs, reversible inhibitors of monoamine oxidase A (RIMAs), which are both selective and reversible, and have much less potential for drug or dietary interaction. These developments have produced the need for a reassessment of peri-operative risk, with concerns about the potential morbidity of abrupt, pre-operative cessation of MAOI therapy questioning the existing guidelines. Thus a short review was thought appropriate.

Physiology of monoamine oxidase

MAO deaminates, and thus inactivates, monoamine neurotransmitters and xenobiotic amines in both the central nervous system and peripheral organs. It is a flavin-containing enzyme, localized on external mitochondrial membranes so that it can only deaminate monoamines in the cytoplasm, unlike catechol-O-methyl transferase, or acetylcholinesterase. Transmitters stored in cytoplasmic vesicles are inaccessible and therefore protected from its actions. Its main function is to maintain low intracellular concentrations of amines, thereby supporting indirectly the re-uptake of neurotransmitters to facilitate termination of their action. It also prevents accumulation of naturally occurring amines and by-products of metabolism in mono-amnergic neurones that could affect the storage, release, re-uptake and actions of physiological neurotransmitters. Hepatic MAO has a crucial role in inactivating circulating monoamines or those, such as tyramine, which are absorbed into the portal circulation. MAO exists as two distinct isoformes, A and B, which can be distinguished on the basis of tissue distribution, substrate specificity and response to inhibitors. MAO-A deaminates preferentially serotonin, norepinephrine and epinephrine, MAO-B the non-polar aromatic amines such as phenylethylamine and methyhistamine. This substrate specificity is relative, and highly concentration dependent, but both metabolise tyramine and dopamine. It is estimated that 70–75% of all MAO activity in man is type B, and most non-neuronal cells contain this. Platelets contain only type B, while placental tissue contains only A. In the liver, type A predominates slightly over B, while the reverse is true in the gastrointestinal tract. Approximately 60% of human brain MAO activity is type A. Mono-amnergic neurones contain mainly type A, apart from serotonergic neurones which...
contain a considerable amount of B. At present this apparent high degree of compartmentalisation remains unexplained, as do its functional consequences.

**The monoamine oxidase inhibitors**

Many substances with a phenyl-ethyl-amine structure (i.e. similar to MAO substrates) are weak competitive inhibitors, but most MAOIs have a reactive group which binds the inhibitor covalently to the enzyme, causing permanent inactivation. The MAOIs currently available in the UK are of two types, hydrazine (e.g. phenelzine) and non-hydrazine (e.g. isocarboxazid and tranylcypromine) derivatives, both inhibiting both types of MAO. Such inhibition means that non-transmitter substances (e.g. tyramine and the indirectly acting sympathomimetic agents), which are metabolized by either type of enzyme, may reach concentrations which produce exaggerated effects. After uptake into noradrenergic neurones they cause release of norepinephrine by displacement from neurotransmitter vesicles in amounts which can precipitate major hypertensive crises (the so called ‘cheese reaction’ to tyramine). Recovery of MAO activity requires synthesis of new enzyme, taking two to three weeks (slightly less with tranylcypromine which forms a less stable bond with the enzyme), and the metabolic consequences are of equal duration.

The RIMAs have significantly different properties, although only one, moclobemide, is available currently in the UK. It inhibits type A MAO selectively, so that metabolism of the substrates of type B continues, resulting in a much weaker, and clinically insignificant, pressor response to tyramine ingestion. Other favourable properties include a reversible action (the drug can be displaced from the enzyme by substrate competition) and a short elimination half-life (two to four hours), so that the clinical effect is more predictable, the risk of drug interactions is less, and MAO activity returns to normal within 24 hours of stopping the drug. In addition, moclobemide is well tolerated, without anticholinergic or hepatotoxic effects, and is relatively safe in overdosage. It does not react with other enzymes, cause postural hypotension, or interact with tricyclic antidepressants, and has no central excitatory effects to cause irritability and insomnia. Thus the drug has a high therapeutic index and a low potential for adverse drug interactions in the peri-operative period.

**MAO enzyme inhibition and anaesthetic drugs**

Although the actions of MAOIs are wide ranging, two reviews have indicated that peri-operative drug interactions are actually quite predictable. The implication is that, in most cases, anaesthetic technique can be modified to allow patients receiving MAOIs to be managed safely.

**Opioids**

There are numerous reports of two distinct types of interaction, each with a fundamentally different mechanism, between MAOIs and opioids.

The type I (‘excitatory’) reaction is characterized by sudden agitation, headache, hyper- or hypotension, muscle rigidity, hyperpyrexia, convulsions and coma. It has only been seen in patients receiving pethidine or dextromethorphan, both of which have an inhibitory effect on serotonin re-uptake. Animal experiments suggest that the reaction is caused by central serotoninergic hyperactivity due to the combination of MAOI reduction in amine breakdown with opioid inhibition of serotonin re-uptake, and that inhibition of both MAO isoenzymes is necessary. This suggests that RIMAs are unlikely to cause a type I reaction, but this is unproven in man so pethidine and dextromethorphan remain contra-indicated.

The type II (‘depressive’) reaction is characterized by hypotension, respiratory depression and coma, and is very rare. The mechanism is thought to be MAOI inhibition of hepatic enzymes, but this is unproven. The reaction can be treated with naloxone and, although there has been one report after morphine, that drug can be used safely in patients taking MAOIs, although the dose must be titrated carefully. Moclobemide does not inhibit hepatic microsomal enzymes so accumulation of opioids is very unlikely. Case reports support the lack of effect of both MAOIs and RIMAs on the metabolism of alfentanil, remifentanil and fentanyl, although high dose fentanyl for cardiac surgery was associated with the death of a patient receiving a classical MAOI.

**Sympathomimetics**

The directly acting sympathomimetics (epinephrine, norepinephrine and isoproterenol) can be used safely in patients receiving MAOIs or moclobemide, but the dose must be titrated carefully against clinical response because their effects may be enhanced by receptor hypersensitivity in those patients who have a hypertensive response to MAOIs.

It is well documented that indirectly acting sympathomimetics can lead to potentially fatal hypertensive crises in patients taking MAOIs. Such crises are characterized by a rapid and marked hypertension, tachycardia, chest pain and severe occipital headache, which
may be accompanied by neck stiffness, sweating, facial flush, nausea, vomiting and occasionally epileptiform seizures. This can culminate in intracranial haemorrhage, cardiac arrhythmia and arrest, so indirectly acting sympathomimetics are contraindicated absolutely in the presence of MAOIs. The hydrazine derivatives are less likely to cause this problem, the incidence with tranylcypromine being five times that with phenelzine,\textsuperscript{33} and the evidence suggests that the interaction is much weaker, but not impossible with moclobemide.\textsuperscript{11,14} Thus the indirectly acting sympathomimetic drugs should still be used with caution because moclobemide could cause a significant pressor response. However, the doses used in the relevant studies\textsuperscript{11,14} were high and the clinical significance of the findings is therefore unclear. The risk of an interaction does decline rapidly with time.

**Intravenous induction agents**

All the commonly used intravenous induction agents (thiopentone, propofol, etomidate and ketamine) have been used uneventfully in patients taking MAOIs.\textsuperscript{14,16} The classical MAOIs can cause a decrease in the hepatic metabolism of barbiturates which requires a reduction in dose.\textsuperscript{17}

**Benzodiazepines**

The combination of MAOIs with benzodiazepines is common in psychiatric practice, and no adverse incidents have been reported when they are combined during anaesthesia.\textsuperscript{9,26}

**Inhalational anaesthetics**

There have been no reports of adverse reactions to nitrous oxide or the volatile anaesthetics in patients treated with MAOIs. Their inhibitory effect on hepatic enzymes provides the theoretical possibility of hepatic damage due to reductive metabolites of halothane, but this has not been reported.\textsuperscript{14–16}

**Neuromuscular blocking drugs**

Phenelzine (but not the other MAOIs) decreases plasma cholinesterase concentration,\textsuperscript{34} and prolongation of the effect of suxamethonium has been reported.\textsuperscript{16,34} This may not only prolong the apnoea, but also modify the seizure produced during electroconvulsive therapy. There are no reports of adverse interactions with the non-depolarising drugs.\textsuperscript{14–16}

**Local anaesthetics**

Modern local anaesthetic drugs may be used safely,\textsuperscript{11,14} but preparations containing epinephrine should be used with caution in certain patients (as described above).\textsuperscript{16} If a vasoconstrictor is required then a drug such as felypressin may be a suitable alternative. There is a report\textsuperscript{59} of a patient on phenelzine developing an excitatory reaction one hour after a general anaesthetic during which topical cocaine was administered. The reaction was attributed to inhibition of serotonin re-uptake by cocaine, but interpretation of the report is difficult because of the delayed nature of the reaction, which occurred in a fully conscious, stable patient.

**Anticholinergic drugs**

There are no reports of adverse interactions between MAOIs and anticholinergic drugs, and studies of moclobemide suggest that they are highly unlikely.\textsuperscript{32}

**Non-steroidal anti-inflammatory drugs (NSAIDs)**

There are no reported cases of adverse interactions between MAOIs and NSAIDs in patients taking a drug from both classes.\textsuperscript{26}

**MAO-B inhibitors**

Drugs specific for MAO-B (e.g. selegiline) are prescribed commonly as adjuncts in the treatment of Parkinson's disease.\textsuperscript{27} Selegiline is a specific inhibitor of MAO-B at doses below 10mg/day (the normal dose) and, at this level, there is no need for dietary restriction or concern about the concurrent oral administration of pharmacologically active monoamines.\textsuperscript{28}

A severe reaction (delirium, stupor, fever, muscle rigidity) has been described in a patient taking selegiline who was given pethidine.\textsuperscript{38} The patient recovered when selegiline and pethidine were discontinued. The pethidine/MAOI interaction is thought to be due to serotonin overactivity and, because serotonin is not a major substrate for MAO-B, should be less severe with selective MAOIs.\textsuperscript{29} Pethidine is, nonetheless, contra-indicated absolutely in patients taking selegiline.\textsuperscript{39}

**MAOIs and RIMAs in modern psychiatric practice**

Despite the decline in usage of irreversible MAOIs, they still have a role in the treatment of a number of psychiatric illnesses, primarily, but not exclusively, depressive disorders. Selective serotonin re-uptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs), remain the first line treatments for most patients. There is a lack of evidence to answer the question of whether augmentation or changing is the most effective course of action; many current recommendations suggest changing to an antidepressant of a different class if a response has not been achieved with two antidepressants.\textsuperscript{40,41} Since 20% of patients fail to respond to the first two antidepressants tried, this will mean an MAOI for many patients. There is evidence that MAOIs may have greater efficacy in particular symptom clusters (particularly those described as ‘atypical’ depression),\textsuperscript{42,43} panic disorder and agoraphobia,\textsuperscript{44} social phobia,\textsuperscript{45} and bulimia.\textsuperscript{46} Thus MAOIs still
have a role, but issues of safety and tolerance mean that they are often reserved for patients with the more severe illnesses, or who are refractory to the other drugs. For the same reasons, many of these patients will receive electroconvulsive therapy (ECT) as well, and this is the setting in which most patients receiving MAOIs will require anaesthesia.

There is a perception that the RIMAs are less effective than the MAOIs, but the literature suggests equal efficacy in comparison to TCAs, SSRIs and irreversible MAOIs themselves. A meta-analysis supported these findings. There is also evidence of comparable effectiveness of RIMAs versus clomipramine in panic disorder. Apparent equal efficacy, and the lower risk of side effects and interactions, mean that it is likely that anaesthetists will be presented with more patients taking RIMAs than has been the case with the classical MAOIs.

Discontinuing MAOIs
Most anaesthetic guidelines advise discontinuing MAOIs at least two weeks prior to anaesthesia, but some recommend only one week in advance and the substitution of ‘alternative … antidepressant medication as necessary’. However, this will not allow sufficient time for enzyme regeneration and risks an interaction between the two antidepressants. Even if this is avoided, discontinuation can lead to the discontinuation syndrome and relapse or recurrence.

Discontinuation syndrome
The discontinuation syndrome was reported first in 1959, and has been recognised with most classes of antidepressant, although it is said to be more severe with MAOIs than with SSRIs or TCAs. It is more common with the shorter half-life drugs such as paroxetine and is associated with changes in mood, appetite, and sleep, often overlapping with depressive symptoms making it difficult to distinguish from relapse. Other associated features can include delirium, depression, mania, irritability, agitation, insomnia and myoclonic jerks. The time of onset of symptoms is a key diagnostic feature, being sooner (within a week) in discontinuation than relapse (within two to three weeks). In one study of discontinuation, 93% of patients developed symptoms within one week.

Relapse or recurrence
Stopping antidepressants prematurely carries a significant risk of relapse or recurrence, the available evidence suggesting that almost 40% of patients switched from phenelzine to placebo will relapse within four weeks, half of these within two, and that the time to relapse is even shorter than with discontinuation of imipramine.

Recommendations
MAOI therapy
Concerns about the risks of general anaesthesia in patients who are taking MAOIs undoubtedly remain, particularly for procedures which may require the use of sympathomimetics (e.g. central nerve block, cardiac surgery). A recent North American survey found that approximately 50% of clinicians still recommend discontinuing MAOIs up to two weeks before surgery, but this ignores the current use of the drugs in patients unresponsive to other treatments, and thus with the more severe illnesses. The risks and consequences of relapse must be assessed and discussed fully on an individual basis before deciding upon a course of action. If cessation is thought necessary the following is advised:

1. If at all possible, the surgery should be planned well in advance, allowing time for liaison with the psychiatric team and evaluation of the risks and benefits of withdrawal. The patient must be involved in these discussions.

2. If the MAOI is to be stopped, the medication-free period must be kept to a minimum, so late cancellation or delay of the operation should be avoided and ideally patients should be presented first on the operating list.

3. If it is agreed that discontinuation is necessary, the dose should be reduced gradually, with regular review of the patient’s mental state, ideally by the patient’s own psychiatric team.

4. The MAOI should be restarted as soon as possible after the operation, once there is no longer a risk of interactions. The aims of re-establishing MAOI therapy are to achieve pre-operative dosage levels as rapidly as possible, while maintaining vigilance for signs of side-effects. Pre-operative plasma concentrations during the re-establishment of MAOI therapy after surgery can be achieved more rapidly than at the initial commencement of MAOI therapy in the MAOI naïve patient.

The management plan should be agreed between the teams, and contingencies (such as postponing any non-urgent procedure and restarting the MAOI) for relapse need to be established in advance.

When it is not thought necessary to discontinue MAOI therapy (the preferred psychiatric option), or when the patient presents as an emergency and discontinuation is not possible, anaesthesia should be conducted so as to avoid sympathetic stimulation, with particular attention paid to adequate volume replacement. Premedication with benzodiazepines aims to reduce stress, which may cause sympathetic stimulation. Pethidine and indirectly acting sympathomimetic agents are contraindicated absolutely. The nature and extent of the surgery will dictate the monitoring
required. Invasive intravascular monitoring is helpful but not mandatory, although may assist in the early detection of cardiovascular instability. Hypotension should be treated by restoration of fluid volume and then, if necessary, with small doses of directly acting sympathomimetic amines (which are more predictable than indirectly acting agents), titrated slowly according to response.

RIMA therapy
The peri-operative management of patients who present for elective surgery taking moclobemide is theoretically more straightforward. Stopping the drug the day before surgery may be all that is required, because MAO function is restored to normal within 24 hours. Emergency surgery should be delayed for 24 hours after the last dose, if possible, but if not the precautions described above for MAOIs should be adopted. However, the risk of interactions is much less than with moclobemide because of its reversible and highly specific action.

Conclusion
The final decision on the administration of anaesthesia in the presence of concurrent MAOI therapy must rest with the individual anaesthetist who should have a detailed knowledge and thorough understanding of the physiology and pharmacology of the MAO enzyme system. Current evidence provides little support for the discontinuation of MAOIs before anaesthesia. Any decision to do so must involve multidisciplinary discussion with a risk/benefit analysis for each patient, but modern anaesthetic practice should be able to cope with the challenge of the patient receiving MAOI therapy. General and regional anaesthesia may be administered safely provided proper monitoring, adequate preparation and prompt recognition and treatment of anticipated and predictable reactions are undertaken, and that certain drugs are avoided or used with extreme caution.

Evidence to date would suggest that the newer selective class of drugs drugs, RIMAs such as moclobemide, have significantly different pharmacology and a much improved side-effect profile. The anaesthetic management of patients taking them, while requiring avoidance of (e.g. pethidine) or caution with (e.g. indirectly acting sympathomimetics) the same drugs as the MAOIs, is much simpler with much less potential for serious interactions.

References


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President, Members of Council, Diplomates, Ladies and Gentlemen,

It is a singular pleasure to be invited to address you today, particularly as a surgeon and hence a member of a team working with my anaesthetic colleagues on a daily basis. The fact that you are now firmly established in your own Royal College does not in anyway diminish the close ties between our two Colleges and hence, whilst holding the office of Vice-President of the Royal College of Surgeons, it was my pleasure to also sit on your Council and subsequently to be elected a Fellow. Such privileges serve to enhance mutual respect between specialties and the important inter-relationships between the colleges which are further facilitated by membership of the Academy of Medical Royal Colleges, of which your President is the current Chairman.

Following contemplation of the many addresses I have heard delivered to Diplomates, I decided to look at some of the current problems we face with the NHS.

So, just where do the Colleges sit in this current very difficult relationship with Government? We do, of course have a direct link with the Department of Health through the Joint Consultants Committee but the relationship of the profession must go further than this. We do need to be able to influence the Government of the day and although such channels do exist they seem alarmingly underused at the moment. The standard setting roles of the Colleges have been challenged in recent times. Bristol and the subsequent Kennedy Enquiry might, at first sight be interpreted as strongly critical of our responsibility for maintaining a culture of continuing excellence amongst our Fellows. In truth, until that time, we did not see ourselves as having any responsibility or authority for established consultants and the positive message from Prof Kennedy was that we should recognise our ongoing lifelong responsibility for overseeing the professionalism of our Fellows. From this the development of Professional Standards and CME Bodies within our organisations has done much to quell this area of public dissatisfaction. Although this College is unique in having no cases reported to the National Clinical Assessment Authority, the fact that the NCAA has recognised that without significant College input it cannot work, serves to reinforce the importance of college structures in the important area of clinical governance. However, the messages from this Government in particular are that the old order must change if public satisfaction and trust are to be assured.

There is no doubt that we have taken some severe criticism, to which we have responded, yet the standing of the medical profession in terms of trust still ranks in the top percentile of public opinion, whilst that of politicians is still very much in the lowest percentile of all.

Our greatest difficulty in maintaining standards is that the politicians wish to see ‘instant fixes’. For them 24 hours is a long period. For us, change takes rather longer to achieve, particularly when outcome measures are the only criteria against which we can be judged. For politicians, outcome measures are seen as the results of the content of the next ballot box. From our perspective, we have a major problem satisfying their timetables, particularly when we are faced with an increasingly aged population, a consequence in itself of the success of medical treatment, greater public expectation, frequently fuelled by media hype and an inexorable rise in demand for services which statistics show has not been met by an equivalent proportionate rise in the medical workforce.

At the end of the Conservative Party’s reign, Sir Kenneth Calman, then the Chief Medical Officer came to the Academy with the welcome news that the then Government had finally recognised the workforce problem and agreed to the establishment of five new medical schools. Then we faced a change in Parliament, a fundamental spending review and five years later a decision, however late, nevertheless welcome, that there would be just three new medical schools so our efforts had been three fifths effective. This means they will start producing graduates in 2008/2009. Yet, by that time, as far as surgery is concerned, no single specialty will have more than three fifths of the consultant workforce deemed necessary based on the Department of Health’s own figures. Furthermore, a document from Brussels, written by a standing working group some five years ago, analysing the health care policies of all European Governments, showed that because of cutbacks in previous overproduction, no single country in Europe would be self sufficient in medical manpower by 2010. Couple this with the now 70% intake of female students to the UK medical schools and the failure to recognise that with such an imbalance more graduates will be needed simply to fill existing posts, and the estimated loss of 20% of current graduates from the profession within five
years of qualification means that our present determination to maintain standards is being placed under even greater challenge. Only one thing seems certain, and that is that none of you receiving your Fellowships today will ever become redundant! Workforce planning has never been an exact science, but whereas we had total control in the days of JPAC, it is now in the hands of the workforce consortia with only minimal medical input and that seems equally inappropriate. It is no good Government pronouncing, for example, a dramatic increase in cardiac services and expecting us to be able to produce an extra 60 surgeons, anaesthetists and their supporting teams off the shelf – we simply do not work that way.

Bristol changed a lot of our activities. It certainly changed things for ever and as is so often the case, change always brings some benefits whatever else it does. I believe one benefit was the Enquiry’s demand that henceforth doctors should not work in isolation but as part of a team. Team-working to some was an anathema, to others logical and welcome. National CEPOD has repeatedly made pleas in its reports for such methods of working to improve care for patients and has long trumpeted the development of Multi-professional Teams, MPTs, as the modern jargon now labels them. This also means that outcomes and the activities leading to them can be shared through clinical audit across the entire team and an active process of clinical governance with the mutual responsibility of clinicians for clinicians has a chance of maturing. Should anaesthetists be appointed as team members? I believe very firmly that they should, and belong not only to the anaesthetic team but also to a surgical team or teams to develop further what our American colleagues call clinical lines, where this process has been accompanied by a budget and each clinical line is expected to manage its affairs within a finite financial limit. However, team membership takes time to work, mutual respect grows and with it prejudices are overcome. Despite team building exercises in many areas of life they have never been a feature of graduate medical education. We have all met the non team player who will bombastically state that: ‘It is perfectly obvious to you that I am a reasonable man’, whilst persisting in working in total isolation, or the person who is simply not a team player.

If this is true for inter-relationships between clinicians it is certainly very true for the relations between clinicians and managers. All too frequently an ‘us and them’ situation is allowed to develop whereas in the American model they are engaged as part of the clinical line to work with clinicians. We have no facility for developing such a relationship within the NHS, yet could learn from the Services model of a Staff College where people at successive levels are brought together to learn from one another and, hopefully, develop multi-professional teams at all levels within the NHS. This bringing together is a role which the Colleges, without any political baggage, can perform. Government, in its broadest sense, have to be persuaded that this vast organisation of the NHS cannot be successful if it continues to be subjected to the inevitable short-termism of politicians, manifested by 18 reforms in 20 years. A system has to be developed which, whilst taking account of the inevitable political input on the one hand, balances it with more realistic longer term funding and planning on the other and it is the Colleges and the Academy which are in a position to facilitate this dialogue. Politicians will not find it easy, nor will we, but to use a somewhat hackneyed political phrase of the day, we must find a THIRD way which does not involve a disassociated Number 10 Think Tank.

And who makes up the Colleges? It is you here today who do, not just the President and Council. I would ask all of you to recognise this and to recognise the important wider roles that you should take in your professional lives, for there is really only room for team players and the stakes are very high.

I would therefore like to wish you all well in your future careers and congratulate you and your hugely supportive families on your achievements but please remember that, from those to whom much has been given, much will be required and I am sure you will heed that in your future careers. It is not simply a question of being an excellent clinician, we must be prepared to take on roles of greater responsibility, if the Health Service in which we work and of which we are justifiably proud, is to survive.

Mr President and Members of Council, I believe these are just a sample of some of the issues of today which we need, collectively, to address, for collectively we form an influential team; united we stand, divided we fall.
What is the purpose of sponsorship?

The Royal College of Anaesthetists (RCA) administers ODTS to assist doctors with proven ability in anaesthesia to obtain limited registration with exemption from the PLAB Test. Although the scheme is primarily intended for doctors who will benefit from postgraduate training in the UK and will return to their home country on completion of training, it is currently overwhelmed by doctors wishing to pursue a permanent career in the UK. The Scheme is administered on behalf of the GMC within a template approved by the Registration Committee.

What are the criteria for selection into the scheme?

1. All applicants must satisfy the GMC’s minimum requirements, which are:
   a. To have a basic medical qualification acceptable to the GMC.
   b. To have done at least one year in an internship post (Pre-registration House Officer).
   c. To have been qualified for at least three years and be of good standing with their Medical Regulator.
   d. To have obtained satisfactory scores in the International English Language Testing System (IELTS).
   e. To have not previously attempted any part of the PLAB Test.

2. In addition the Royal College of Anaesthetists will expect the candidate to meet the following criteria:
   a. To currently be working, or have worked within the last six months, in their home country.
   b. To hold a higher postgraduate qualification in anaesthesia that requires three or more years of clinical training, awarded by (and with a syllabus and standards set by) a national qualifications board, e.g. the Indian Diplomate of the National Board (DNB) or MD Postgraduate Institute of Medicine, Sri Lanka.

What about trainees from countries that do not have a national qualification?

The RCA in special circumstances may agree to sponsor doctors who do not fulfill the criteria outlined in paragraph 2b. This is intended to allow UK based consultants, with established links overseas, to recommend doctors for sponsorship. These doctors would normally have been chosen in their country of origin as likely to benefit from postgraduate training in the UK. However, an additional condition for approval of such sponsorship is that the UK based consultant is able to place the trainee in a suitable training post and ensure appropriate supervision.

Are there any restrictions on doctors with Limited Registration obtained through the sponsorship route?

There are three main restrictions:

1. ODTS sponsored doctors can only be appointed to substantive training posts approved and funded by the Postgraduate Dean, e.g. SHO, SpR, FTTA.
2. The initial grant of registration is limited to a maximum of 12 months.
3. The Limited Registration will only cover the post, the grade and the period stated in the Certificate of Selection of Employment (CSE) completed by the relevant Medical Staffing Department. N.B. A trainee’s registration may not be valid for all hospitals within a training rotation unless every hospital is listed in the CSE.

Can an ODTS sponsored trainee take up a Trust Grade Post that offers the same training opportunities as an approved post and falls within the ‘training capacity’ recognised by the RCA?

No. Under the present arrangement with the GMC this is not permitted. However, where an ODTS sponsored trainee can benefit from training that is only available in an unapproved post, e.g. Clinical Fellow or Research Fellow, the RCA may consider sponsorship, provided that the objectives for training are clear and approved by the Bernard Johnson Adviser. Trainees should be made aware that time spent in such a post would not count towards the CCST programme.
What about Clinical Attachments?
Well structured attachments with appropriate support are a useful way of introducing overseas trainees to UK anaesthetic practice and environment. However, doctors wishing to obtain limited registration with PLAB exemption via the ODTS route are expected to confirm their eligibility for sponsorship before leaving their home country. Clinical attachments cannot be used as a ‘fast track’ method of obtaining sponsorship. The criteria for selection to the ODTS will not be relaxed purely on favorable references obtained following a short clinical attachment.

When can sponsored doctors commence ‘out of hours’ duties?
The RCA requires every trainee to complete the Initial Assessment of Competency before being allowed to practice without direct supervision. Experienced overseas doctors working in the UK for the first time could undergo this initial assessment after a short period of familiarisation. It would be reasonable to expect ODTS sponsored doctors to pass this assessment well within three months of taking up a training post. This is an important initial assessment of the overseas trainee’s suitability to continue training in the UK.

What is the period of sponsorship?
Sponsorship is available for a maximum of four years. Under current regulations overseas doctors with Limited Registration can apply for Full Registration after one year of satisfactory progress in a substantive training post and therefore it would be very unusual for a doctor to remain in the scheme for the full period. Progress of sponsored doctors will be monitored by the ODTS office, initially at the end of the first period of employment in the UK and thereafter on each renewal of registration. Renewal of sponsorship is not automatic and will depend on satisfactory reports from two educational supervisors – one of whom should normally be the College Tutor.

If a College Tutor would like to discuss an individual trainee or any aspect of the ODTS they should contact Mrs. Sandra Wood, the ODTS Administrator or Dr Preman Jeyaratnam, the Bernard Johnson Adviser, at the College via email oits@rcoa.ac.uk.

Racial monitoring
The Race Relations (Amendment) Act 2000 contains a number of provisions that affect the Royal College of Anaesthetists as a public body and in its role as an agent of the Specialist Training Authority. Specifically the Act outlaws race discrimination and places a general duty on the College to promote racial equality.

Last year Council agreed that College officers in post on 1 June 2002 and all future trainees and applicants for College office, Fellowship and Membership, should be asked if they would disclose their racial origin. This provides some data for the College if it should ever be challenged on its race relations record. To date 27% of all Fellows, Members and trainees have responded and a further 7% have declined to answer. It has now been decided to extend racial monitoring on a voluntary basis to all Fellows and Members.

If you would like your racial origin to be recorded on the College’s database please email subs@rcoa.ac.uk, giving the following information:

- Full name
- College Reference Number (CRN)
- Date of birth
- Racial origin from the following list:
  - White
  - Black (African)
  - Black (Caribbean)
  - Bangladeshi
  - Indian
  - Pakistani
  - Middle Eastern
  - Chinese
  - Other

This information will be used only for monitoring the College’s compliance with the Race Relations (Amendment) Act 2000.
Aspects of Myocardial Physiology (Part 2)

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Introduction

This is the second of two articles covering aspects of myocardial physiology which are important to candidates preparing for the Primary FRCA.

The control of cardiac output

Cardiac output is the volume of blood pumped through the heart per minute, i.e. stroke volume (SV) x heart rate. In a normal 70 kg man at rest this is approx 5 L/min. Therefore changes in stroke volume or heart rate will alter cardiac output. Stroke volume is the difference between the ventricular end-diastolic volume (EDV) and the endsystolic volume (ESV) (the blood remaining after ejection). Any factor which alters either EDV or ESV will change SV.

Control of stroke volume

At a heart rate of 70 beats per min the SV of a normal resting adult will be ~ 80ml. The mean EDV at rest will normally range from ~ 110–130 ml. The ejection fraction (EF), the ratio SV/EDV, is normally ~ 70% in man.

There are three primary mechanisms that regulate EDV and ESV, and therefore, SV.

i) Preload

The heart has the intrinsic capability of increasing its force of contraction when preload is increased. Preload can be defined as the initial stretching of the cardiac myocytes prior to contraction and is related to sarcomere length. When venous return is increased to the heart, ventricular filling and hence preload (usually measured as end-diastolic volume or pressure) increases. An increased preload leads to an increased force of contraction and an increased stroke volume (SV). Preload is mainly dependent on the return of venous blood from the body. Venous return is influenced by changes in position, intrathoracic pressure and the balance between constriction and dilatation (tone) in the venous system.

This relationship between EDV and SV is known as Starling’s Law of the Heart, (Figure 2) which states that the energy of contraction of the muscle is proportional to the initial resting length of the muscle fibre. Greater initial length of the muscle fibres increases the sensitivity of the myofibrils to calcium and may also increase calcium release from the sarcoplasmic reticulum thus resulting in increased force of contraction.

Figure 2 The Starling Curve – the relationship between end-diastolic volume (providing afterload is constant)

Re-printed from Bray JJ et al, Lecture Notes on Human Physiology. 4th edition. With permission from Blackwell Publishing Ltd.

ii) Afterload

This is the ‘load’ that the heart must eject blood against, i.e. the resistance to ventricular ejection. Simply, the afterload is closely related to the aortic pressure. More precisely, the afterload can be stated in terms of ventricular wall stress:

Ventricular wall stress ∝ ventricular pressure x ventricular radius/wall thickness.
Afterload is increased by an anatomical obstruction, e.g. aortic stenosis, raised systemic vascular resistance, increased aortic pressure and ventricular dilation.

An increase in afterload decreases the velocity of muscle fibre shortening. There is a limited time for ejection, so a decrease in fibre shortening velocity reduces the rate of ventricular ejection and SV is reduced.

Stroke volume can be maintained in the face of an increase in afterload. Increasing afterload not only reduces stroke volume, but it also increases left ventricular end-diastolic pressure (LVEDP) (i.e. increases preload). This occurs because the increase in end-systolic volume is added to the venous return into the ventricle resulting in an increase in end-diastolic volume. This increase in preload will stimulate the Frank-Starling mechanism to partially compensate for the reduction in stroke volume caused by the increase in afterload.

At normal mean arterial pressure (up to ~ 100mmHg), the cardiac output is relatively independent of arterial blood pressure. Even though the left ventricular SV may be temporarily reduced by a moderate increase in systemic arterial pressure, the right ventricle continues to pump, which maintains the left ventricular filling pressure and EDV. This factor, as well as the length-tension relationship (Starling’s law) (Figure 2) helps restore the left ventricular output at these higher arterial pressure levels. As a result SV increases. Over the course of a few beats SV therefore returns to its original value.

Increased afterload results in increased myocardial work and $O_2$ consumption.

iii Contractility

This is an extrinsic factor that enables the heart to contract more strongly at an equivalent diastolic volume (i.e. it is independent of preload). Factors that affect the inotropic state or contractility of the heart may be of three general types (a) neurohormonal effects, due to the influences of the sympathetic or parasympathetic systems or of the catecholamines; (b) chemical and pharmacological effects, e.g. contractile changes due to alterations in blood K+, Ca2+, pH or drugs such as digitalis and sympathetic ‘blockers’ and (c) pathological effects, e.g. those due to ischaemia secondary to coronary occlusion or toxic effects resulting from bacteria or chemicals.

In the normal circulation, a positive inotropic effect is commonly mediated through sympathoadrenal discharge which will improve cardiac performance in several ways; ventricular contraction is more rapid (increased $V_{\text{max}}$ and $dP/dt$) and is stronger. As a result the ventricles empty more completely (i.e. there is a decrease in ESV and an increase in SV) which will produce a higher systolic pressure in the ventricle and aorta. If the cause of the increased inotropic state is sympathetic stimulation, there will be an associated increase in HR; the degree of SV increase may be limited by the shortening of ventricular filling time incident to the rate increase. However, with sympathetic stimulation, the net result is usually an increased cardiac output (CO). A negative inotropic effect, by vagal stimulation, will decrease HR and impulse conduction and diminish atrial contractility.

Sympathetic stimulation moves the Starling curve upward and to the left. The alteration of inotropic state of cardiac muscle is probably related to the rate of Ca2+ binding to troponin.

The Starling effect ensures that:

1. The output of the heart matches the volume delivered to it.
2. SV is maintained against rises in arterial pressure.
3. The outputs of the two sides of the heart are matched to prevent congestion in either the pulmonary or systemic circulations, i.e. matching input venous return (VR) to output (CO).
4. Any transient changes in interbeat interval (and hence of cardiac filling) are immediately compensated for by a stronger or less forceful beat.
Loss of pressure generation resulting from the Laplace relationship is compensated for.

If the heart becomes greatly distended with blood during diastole, as may occur in cardiac failure, it is less efficient: more energy is required (greater wall tension) for the distended heart to eject the same volume of blood per beat than for a normal heart. This is an example of Laplace’s law which states that the tension in the wall of a vessel (in this case the ventricles) equals the transmural pressure (pressure across the wall, or distending pressure) times the radius of the vessel or chamber. The Laplace relationship applies to infinitely thin-walled vessels but can be applied to the heart if a correction is made for wall thickness. The equation is $T = Pr/w$ where $T =$ wall stress, $P =$ transmural pressure, $r =$ radius, and $w =$ wall thickness.

Venous return curves

Venous return is influenced by changes in position, intrathoracic pressure and the balance of constriction and dilatation (tone) in the venous system.

The right atrial filling pressure = mean systemic filling pressure (MSFP) – mean Right Atrial Pressure (CVP). The greater the pressure difference, the greater the venous return.

MSFP = the weighted average of the pressures in all portions of the systemic circulation; the weighting is in proportion to the volume capacity of the vessel. It is also the static blood pressure throughout the systemic circulation if the heart is suddenly arrested experimentally and rapid equilibration of pressures in arterial and venous circuits has occurred, usually ~ 7mmHg.

For a given venous capacity, MSFP increases when the blood volume is expanded. For a given total blood volume, MSFP increases when the venous blood is compressed by venoconstriction (i.e. venous capacity is decreased).

The higher the MSFP the greater the venous return.

Cardiac output curves

The classic Starling curve showed that after an increase in ventricular EDV, the succeeding contraction would result in an increased intraventricular pressure. This will result in an increased SV and cardiac output. In this way, cardiac output can be related to right atrial pressure (RAP) in the form of cardiac output curves. The up-slope of this curve is very steep, and cardiac output increases substantially with only small changes in RAP. The curves then plateau. The plateau represents the maximum cardiac pumping capacity, no matter how great the venous return.

The venous return curves attempt to quantitate the venous return provided by the peripheral circulation, i.e. by the MSFP, at any given level of RAP. The cardiac output curves attempt to quantitate the output of the heart on the basis of the RAP provided by the peripheral circulation. Thus the common element is the RAP – a critical determinant of both venous return and cardiac output.

If the blood volume is increased by transfusion, the MSFP will be considerably increased as will the venous return and cardiac output (point b below).

Sympathetic stimulation has two effects: (a) contraction of the peripheral vasculature, particularly of the venous bed, will increase the MSFP and therefore the pressure gradient increases ventricular contractility and shifts the atrial pressure-cardiac output curve to the left. The cardiac output is therefore moved from point a to point c. Conversely with sympathetic inhibition, the cardiac output might be reduced from point a to point b.

![Figure 4](image-url)
for venous return, and (b) an increase in cardiac contractile strength will move the ventricular function curve to the left. The venous return and cardiac output would both increase and their junction point a to c.

**Regulation of heart rate**

Heart rate is normally determined by the pacemaker activity of the SA node. The SA node exhibits intrinsic automaticity with a spontaneous firing rate of ~100 beats/min. Normally, at rest there is significant vagal tone on the SA node so that the resting heart rate is 60–80 beats/min.

Heart rate is of importance in two general ways, (a) a mechanical or indirect effect on cardiac output by virtue of the influence of the rate on the length of diastole and therefore on EDV and SV, and (b) a direct intrinsic effect of rate on myocardial contractility — usually termed the ‘interval-strength’ effect. When the heart rate increases there is a proportional increase in cardiac muscle force. This phenomenon is known as the staircase, Treppe or Bowditch effect. At a constant left atrial filling pressure, an increase in heart rate will decrease diastolic filling time and consequently, decrease the subsequent SVs. However, most ventricular filling occurs during the initial rapid-filling phase. Since a modest increase in heart rate encroaches first on this late, slower-filling phase (diastasis), the effect on diastolic filling is minimised and CO will increase.

**Oxygen consumption and work of the heart**

The main determinants of myocardial oxygen consumption are (a) ventricular wall tension, (b) heart rate and (c) velocity of myocardial shortening. Cardiac cells have a greater mitochondrial content than skeletal muscle — probably because they are required to contract repetitively over a lifetime and are incapable of developing a significant oxygen debt — so they need a ready source of energy. To further enhance its metabolic capability, the myocardium has a rich capillary supply.

**Important factors affecting myocardial oxygen supply-demand balance**

**Supply**
- Heart rate
- Diastolic time
- Coronary perfusion pressure
- Aortic diastolic pressure
- Ventricular end-diastolic pressure
- Arterial Oxygen content
- Arterial oxygen tension
- Haemoglobin concentration
- Coronary vessel diameter

**Demand**
- Basal requirements
- Heart rate
- Wall tension
  - Preload (ventricular radius)
  - Afterload
- Contractility

The heart rate, and to a lesser extent, ventricular EDP are important determinants of both supply and demand.

**Further reading**


Levick JR. *An Introduction to Cardiovascular Physiology*. Oxford. Butterworth-Heinemann Ltd.
Please note that unless indicated otherwise, lunch is included in the registration fee.

How to Teach – Teaching Methods
1–2 October 2003 (code: A37)
St Anne’s College, Oxford
An intensive two day workshop for consultants and senior SpRs. Please note this workshop has limited places. Registration fee: £400 (which includes accommodation at St Anne’s College on 1 October).

NCCG Autumn Meeting
16 October 2003 (code: C63)
The Royal College of Anaesthetists, London WC1
Held jointly with the Association of Anaesthetists. Registration fee: £175.

Meeting for Newly Appointed Consultants
17 October 2003 (code: C40)
The Royal College of Anaesthetists, London WC1
Registration fee: £180.

Progress in Anaesthesia, Critical Care and Pain
21 October 2003 (code: D09)
Education Centre, James Cook University Hospital, Middlesbrough
Speakers will be a mixture of local and regional experts together with support from one or more members of the College Council. The timing of the meeting will allow anaesthetists from across the North of England and the East coast to reach Middlesbrough in ample time for the start. Registration fee: £180.

Course on Current Topics in Anaesthesia
27–31 October 2003 (code: C11)
The Royal College of Anaesthetists, WC1
Consisting of lectures and discussion, it is intended as both a refresher course and update on the latest techniques for consultants and NCCGs. Registration fee: £500.

Emergencies in Anaesthetic Practice
29 October 2003 (code: C97)
Malone House, Belfast
Held jointly with the College of Anaesthetists, RCSt. Registration fee: £100.

College Symposium
High Quality Anaesthesia – Best practice
6–7 November 2003 (code: B05)
Institution of Electrical Engineers, London
In addition to the two day programme, there is an opportunity to meet with colleagues and friends at an informal reception on the evening of 5 November. Registration fee: £330 (trainees registered with the College: £280).

CME Day
8 November 2003 (code: A76)
Institution of Electrical Engineers, London
A joint meeting with the AAGBI. Registration fee: £180.

RCA and BJA Research Methodology Meeting
13 November 2003 (code: C43)
The Royal College of Anaesthetists, WC1
Registration fee: £100.

Christmas Lecture 2003
15 December 2003
The Royal College of Anaesthetists, WC1
Aimed at School leavers and other sixth formers considering a career in medicine and associated subjects. Further details to follow.

Clinical Governance Meeting
January 2004
Venue and further details to follow.

Basic Sciences Course for the Primary FRCA
12–23 January 2004 (code: A78)
Birkbeck College, London WC1
This course is intended to complement study for the Primary examination and consists of two weeks of full time lectures on those aspects of physiology, pharmacology and statistics that are of relevance to anaesthetists. Lectures will take place between 09:00 and 16:30 Monday to Friday. Tutorials will also be held during the course and each participant will be entitled to attend four tutorials. A separate application form is available. Please do not use the generic application form. Registration fee: £550.

How to Teach – Teaching Methods
4–5 February 2004 (code: C80)
The Cavendish Hotel, Eastbourne
An intensive two day workshop for consultants and senior SpRs. This workshop has limited places. Registration fee to be advised.

Final FRCA Course
16 February to 5 March 2004 (code: A82)
Birkbeck College, London WC1
This course is intended for those studying for the Final FRCA Examination and consists of three weeks of full time lectures on anaesthesia, intensive care and pain relief. The lectures run throughout the day between 09:00 and 17:00. Tutorials will also be held during the course and each participant will be entitled to attend one week of tutorials from 16:45–18:00 at the College. A separate application form for this course is available from the Courses and Meetings Department. Please do not use the generic application form. Registration fee: £680.

Airway Day Workshop
10 March 2004
Venue in Cardiff to be advised
Further details to follow.

College Anniversary Meeting
Anaesthesia and Organ Failure
17–18 March 2004 (code: A03)
Institution of Electrical Engineers, London
Further details to follow. Registration fee to be advised.

Anaesthetic Emergencies
A Core Topic Day
25 March 2004 (code: C49)
Venue to be confirmed in Glasgow
A one-day meeting covering core topics on anaesthetic emergencies such as crisis management, cardiac arrest, failed intubation and anaphylaxis. Registration fee: £180.

Review Day for NCCG Anaesthetists
29 March 2004 (code: A12)
The Royal College of Anaesthetists, London
This is a clinical study day for NCCGs such as staff grades, associate specialists and those doing a significant number of clinical assistant sessions who would like to update their knowledge on common areas of practice. The seminar is designed to allow time for discussion and group work around a number of anaesthetic and resuscitation scenarios. Those who have not had a recent opportunity to review anaesthetic practice are particularly welcome. Registration fee: £175.
Airway Day – A Core Topic Day
7 April 2004 (code: C19)
Royal College of Obstetricians and
Gynaecologists, Regent’s Park, London
A one-day meeting covering core topics such as
failed ventilation, new airway equipment, the
shared airway and pre-operative airway
evaluation. Registration fee: £180.

Paediatric Anaesthesia
A Core Topic Day
29 April 2004 (code: D08)
Venue in Bristol to be confirmed.
Registration fee: £180.

Diplomates Day 2004
5 May 2004
Venue to be advised
A ceremony of presentation of diplomates for
those doctors who passed their Final exam in
June 2003 and December 2003. Attendance
will be by invitation only. Further details will
be posted in February/March 2004.

How to Teach – An Introduction to
Teaching for SpRs
27 May 2004 (code: C18)
The Royal College of Anaesthetists, London
A meeting designed to introduce post-FRCA
SpRs to the skills that are required to
facilitate effective teaching and training.
Registration fee: £110.

Course on Current Topics in
Anaesthesia
7–9 June 2004
Venue in Birmingham to be advised
Consisting of lectures and discussion, it is
intended as both a refresher course and update
on the latest techniques for consultants and
NCCGs. Registration fee to be advised.

NCCGs as Teachers
8 June 2004
The Royal College of Anaesthetists, London
A meeting designed to introduce post-FRCA
NCCGs to the skills that are required to
facilitate effective teaching and training.
Registration fee to be advised.

Training Paramedic Trainers
14 June 2004
The Royal College of Anaesthetists, London
Further details to follow.

Intensive Care Meeting
17–18 June 2004
Institution of Electrical Engineers, London
Held jointly with the Intensive Care Society.
Further details to follow.

Airway Workshop Day
29 June 2004 (code: C81)
Venue in London to be advised
Further details to follow.

College Tutors’ Meetings
1–2 July 2004
Venue in London to be advised
A two-day meeting for all College Tutors,
Programme Directors, Regional Advisers and
Deputy Regional Advisors. Attendance will be
by invitation only.

Basic Sciences Course for the
Primary FRCA
5–16 July 2004
Birkbeck College, University of London
This course is intended to complement study for
the Primary examination and consists of two
weeks of short lectures on those aspects of
physiology, pharmacology and statistics that are
of relevance to anaesthetists. Lectures will
take place between 09:00 and 16:30 Monday to
Friday. Tutorials will also be held during the
course and each participant will be entitled to
attend four tutorials. A separate application
form is available. Please do not use the generic
application form. Registration fee: £550.

Anaesthetic Emergencies
A Core Topic Day
July 2004
Venue in London and further details to be advised.

All meetings have CEPD approval on the
basis of five points for a full day and
three points for half a day.

Retired Fellows continuing to subscribe
to the College are entitled to attend
meetings at half price.

Please complete the generic application
form or contact the Courses and
Meetings Department at the College for
further information.

The Courses and Meetings Department
Training and Examinations Directorate
The Royal College of Anaesthetists
48/49 Russell Square
London WC1B 4JY

switchboard 020 7813 1900
ansaphone 020 7813 1888
fax 020 7636 8280
email educ@rcoa.ac.uk

Please note that new
meetings and updated
programmes are available
on the College website
(www.rcoa.ac.uk/courses)

How to Teach – Teaching Methods
Workshop
1–2 October 2003 (code: A37)
at St Anne’s College, Oxford OX2

There are limited places for this workshop.

An intensive two day workshop for consultants, NCCG’s and post-Fellowship SpRs
about the teaching techniques that are useful for anaesthetists who plan and
participate in education programmes for medical students, anaesthetic trainees
and consultants.

Delegates will learn how to extend their repertoire of teaching techniques both in
theatre and in the classroom. There will be an emphasis on the skills of planning,
teaching and giving feedback. The workshop will include lectures and discussion
groups and there will be an opportunity for participants to be videoed making a
short presentation and to discuss their style with a professional actor.

One night’s accommodation at St Anne’s College, lunch/refreshments and dinner
on the first evening of the Workshop are all included in the registration fee.

Registration fee: £400
Approved for CEPD purposes
Joint meeting with the Association of Anaesthetists of Great Britain and Ireland

**Autumn NCCG Day**
16 October 2003 (code: C63)
at the Royal College of Anaesthetists, London WC1
Topics will include:
- The future for SAS doctors.
- Who represents the group, where and what are the issues?
- Acute vascular emergencies.
- New airway devices.
- Trauma anaesthesia.
- Transfer of critically ill patients.

Registration fee: £175
Approved for CEPD purposes

**Meeting for Newly Appointed Consultants**
17 October 2003 (code: C40)
at The Royal College of Anaesthetists, WC1
Topics will include:
- Who and how to supervise.
- Theatre teaching.
- Appraisal and assessment of trainees.
- Examinations, examining and observing.
- Relationships with the Postgraduate Dean.
- How to be an achiever.
- How to survive.

Registration fee: £180
Approved for CEPD purposes

**Clinical Directors Meeting**
Venue in London and date to be announced
A meeting to discuss issues in anaesthesia. Attendance will be by invitation only.
Approved for CEPD purposes

**Progress in Anaesthesia, Critical Care and Pain**
A Core Topic Regional Day
21 October 2003 (code: D09)
at The Education Centre, James Cook University Hospital, Middlesbrough

10.00  Registration and coffee
10.25  Welcome – Dr P G P Lawler, Middlesbrough

**Morning Session (Chairman – Professor C Dodds, James Cook University Hospital)**
10.30  Progress in the management of sepsis  
Dr A M Batchelor, Royal Victoria Infirmary, Newcastle
11.05  Progress in pre-assessment  
Dr W Scott, Derby City General Hospital
11.40  Standards of acceptable anaesthetic practice  
Dr A J Mortimer, Wythenshawe Hospital
12.15  Discussion
12.45  Lunch

**Afternoon Session (Chairman – Dr P G P Lawler, James Cook University Hospital)**
13.45  Progress in airway management  
Dr D P Cartwright, Derby City General Hospital
14.20  Progress in pain management in children  
Dr M Tremlett, James Cook University Hospital
14.55  Discussion
15.10  Tea
15.35  Progress in the management of acute respiratory failure  
Dr S Baudouin, Royal Victoria Infirmary, Newcastle
16.10  Progress in management of cardiac arrest  
Mr K Han, Middlesbrough General Hospital
16.45  Discussion
17.00  Round up and Finish  
Dr P G P Lawler, Professor C Dodds

Registration fee: £180
Approved for CEPD purposes
Course on Current Topics in Anaesthesia
27–31 October 2003 (code: C11)
at The Royal College of Anaesthetists, WC1
This course consists of a week of lectures, each of which is followed by ample time for discussion. It is intended for doctors engaged in clinical anaesthesia (i.e. consultant, specialist grade or their overseas equivalent) who feel that they may benefit from a refresher course in the latest techniques. Places will not be allocated to anaesthetists in training. The programme will cover topics under the following headings:
- Scientific foundations of anaesthesia and their clinical implications.
- Advances in anaesthesia, intensive care and pain.
- Local and regional anaesthetic techniques.
- Anaesthetic equipment and monitoring.
- Postoperative care.

Registration fee: £500
Approved for CEPD purposes

Core Topic Day
Emergencies in Anaesthetic Practice
29 October 2003 (code: C97)
at Malone House, Belfast

Session 1 (Chairman – Professor R K Mirakhur)
11:00–11:35 Perioperative arrhythmias
Dr Norman Campbell, (Royal Hospitals, Belfast)
11:35–12:10 Cardiac arrest
Dr Jeanne Moriarty (St James’s, Dublin)
12:10–12:45 Acute cardiac failure
Dr Robert Feneck (St Thomas’s, London)
13:00–14:00 Lunch

Session 2 (Chairman – Professor P Hutton)
14:00–14:35 Head Injuries; immediate management and treatment
Dr Peter Andrews (Edinburgh)
14:35–15:10 Anaphylaxis; diagnosis and management
Dr Nigel Harper (Manchester Royal Infirmary)
15:10–16:45 Lunch

Session 3 (Chairman – Professor A J Cunningham)
16:00–16:35 Failed Intubation/aids to difficult intubation
Professor George Shorten (Cork University Hospital)
16:35–17:10 Paediatric trauma
Dr John Sinclair (Glasgow)
17:30 Close of meeting

Registration fee: £100
Approved for CEPD purposes
Autumn Symposium 2003
High Quality Anaesthesia – Best Practice
6–7 November 2003 (code: B05)
at the Institution of Electrical Engineers, Savoy Place, London WC2

Thursday, 6 November

Session 1 – Anaesthetic technique – Best practice
10.00–10.25 Total intravenous anaesthesia
   Professor G Kenny, Glasgow Royal Infirmary
10.25–10.50 Inhalational anaesthesia
   Dr G Nunn, The General Infirmary at Leeds
10.50–11.15 Regional anaesthesia
   Dr N Denny, Queen Elizabeth Hospital, Kings Lynn
11.15–11.25 Discussion and coffee

Session 2 – Education and individual performance – Best practice
11.50–12.15 CPD and maintaining best practice
   Sir John Lilleyman, Royal London Hospital
12.15–12.40 Monitoring performance; assessment and appraisal
   Dr K Myerson, Eastbourne District General Hospital
12.40–13.05 Education; service v training; time v competency
   Dr D Greaves, Royal Victoria Infirmary, Newcastle upon Tyne
13.05–14.15 Discussion and lunch

Session 3 – Pain management – Best practice
14.20–14.55 Neuraxial techniques for post-operative pain
   Professor H Breivik, Rikshospitalet, Oslo
14.55–15.20 Opioids for chronic non-cancer pain
   Dr P Collins, Taunton and Somerset Hospital
15.20–15.45 Epidural steroid injections- low back and leg pain of spinal origin
   Dr E Walsh, Southmead Hospital, Bristol
15.45–16.30 Discussion and tea

Session 4 – Quality control and healthcare management – Best practice
16.35–17.00 Learning from NCEPOD
   Dr A Gray, Norfolk and Norwich University Hospital
17.00–17.25 Clinical governance in anaesthesia
   Dr S O’Kelly, The Great Western Hospital, Swindon
17.25–17.50 Skill-mix and new working practices
   Dr J Moore, Department of Health
17.50–18.00 Discussion and Reception for all delegates

Friday, 7 November

Session 5 – Anaesthetic drugs – Best practice
09.10–09.35 Fluid and electrolytes
   Professor M Mythen, Institute of Child Health, London
09.35–10.00 Drugs for haemodynamic control
   Dr R Feneck, St Thomas’ Hospital, London
10.00–10.25 Safety and side effects of COX2 inhibitors and other NSAIDs
   Professor H McQuay, Churchill Hospital, Oxford
10.25–11.00 Discussion and coffee

Session 6 – Risk management – Best practice
11.05–11.30 Developing Effective guidelines
   Dr R A Moore, Churchill Hospital, Oxford
11.30–11.55 Consent for anaesthesia
   Dr D Bogod, Nottingham City Hospital
11.55–12.30 Errors in healthcare: the study of safety
   Professor C Vincent, St Mary’s Hospital, London
12.30–13.45 Discussion and lunch

Session 7 – Hickman Eponymous Professor of Anaesthesia
13.50–14.30 Safer central venous access – A pivotal role for anaesthetists
   Dr A Bodenham, Leeds General Infirmary
14.30–14.55 Tea

Session 8 – Paediatrics – Best practice
15.00–15.25 Paediatric and neonatal resuscitation
   Professor A Wolf, Bristol Royal Infirmary
15.25–15.50 Sedation for babies and children
   Dr M Sury, Great Ormond Street, London
15.50–16.15 Transfer of the sick child
   Dr P Crean, The Royal Belfast Hospital for Sick Children
16.15–16.30 Discussion and close

Registration fee: £330
(£260 for trainees registered with the College)
Approved for CEPD purposes
Continuing Medical Education Day
Saturday, 8 November 2003 (code: A76)
at the Institution of Electrical Engineers, Savoy Place, London WC2

Topics to include:
- Stabilising the critically ill child (DGH point of view).
- Consent and risk.
- Anaesthesia for maxillofacial surgery.
- Acute pain team.
- Sick obstetric patient.
- Arrhythmias.
- Anaesthesia in the elderly.
- Lung pathology in anaesthesia.
- Airway management equipment.
- Low flow in anaesthesia.
- Anaesthesia for vascular surgery.
- Inotropes in anaesthesia – what can I use next.
- Burns.
- Critical incident management.
- Anaesthesia and major trauma – The first hour in hospital.
- Issues/developments of orthopaedic anaesthesia.
- Anaesthesia for the sick laparotomy.
- Dealing with difficult colleagues.

Registration fee £180
Approved for CECPD purposes

Research Methodology Meeting
13 November 2003 (code: C43)
at the Royal College of Anaesthetists, WC1

This meeting is designed to introduce participants to the way in which good research should be conducted and presented. It will be useful for anaesthetists of any grade who are already involved in research or about to embark on a research project. Post FRCA Specialist Registrars and Lecturers will find this meeting to be particularly appropriate to their needs since knowledge of research methodology is one of the non-clinical topics which form an important part of Post FRCA training. Even if actual research is not undertaken it is considered essential for trainees to acquire an understanding of research methodology so that they are able to critically appraise research reports in the literature.

The presentations will be given by experienced anaesthetists who possess an extensive knowledge of all the issues related to research. There will be group sessions in which participants will be able to work on exercises provided by the faculty members. The number of delegates at the meeting will be restricted to ensure that everyone is able to participate in the small group work.

The teaching sessions will address the following topics:
- Developing a research idea.
- Study design.
- Project management.
- Analysis, presentation and interpretation of data.
- Dissemination of results.

Group sessions will allow participants to:
- Provide criticism of a published research paper.
- Design a clinical trial.
- Detect common pitfalls in analysis and interpretation of data.

Registration fee: £100
Approved for CECPD purposes
The British Journal of Anaesthesia Symposium
26 February 2004
The Recovery Period

9.00–10.00  Registration, coffee and trade exhibition
10.00  Session 1 – Chairman, Professor J M Hunter
10.00–10.30  Influence of anaesthetic and analgesic techniques on outcome
Professor F Bonnet (Paris)
10.30–11.00  Recent advances in postoperative pain therapy
Professor I Power (Edinburgh)
11.00–11.30  Advances in the treatment of PONV
Professor D J Rowbotham (Leicester)
11.30–12.15  Guest Lecture
The future of the speciality of anaesthesia in the twenty-first century
Professor R D Miller (San Francisco)
12.15–13.30  Buffet lunch and trade exhibition
13.30  Session 2 – Chairman, Professor C S Reilly
13.30–14.00  Postoperative myocardial infarction – aetiology and prevention
Professor H Priebe (Freiburg)
14.00–14.30  Chronic pain after surgery
Professor H Kehlet (Copenhagen)
14.30–15.00  Cognitive and psychological changes in the postoperative period
Dr C D Hanning (Leicester)
15.00–15.30  Tea and trade exhibition
15.30  Session 3 – Chairman, Professor G M Hall
15.30–16.00  Fluid therapy and renal dysfunction in the postoperative period
Professor J W Sear (Oxford)
16.00–16.30  The role of extended HDU and outreach ICU
Dr D Goldhill (London)
16.30–17.00  Injuries associated with anaesthesia – a global perspective
Professor A R Aitkenhead (Nottingham)

Registration fee: £120
The meeting will be held at the Hanover International Hotel and Club, Hinckley. For further information, please contact Christine Gethins, University Department of Anaesthesia, Critical Care and Pain Management, Leicester Royal Infirmary, Leicester LE1 5WW
tel 0116 258 5291  email chg2@le.ac.uk

COURSES AND MEETINGS
Booking procedures

A generic application form for all events, except FRCA courses, is contained in every edition of the Bulletin. This is also available to download from the College website (www.rcoa.ac.uk/courses).

Application forms for the Final FRCA course and Basic Sciences course for the Primary FRCA are available separately from the Courses and Meetings Department.

Once a course or meeting and the relevant fee have been publicised, bookings on the generic application form will be accepted at any time. The appropriate fee must be paid at the time that the booking is made (bookings will not be accepted for events that do not show a fee). If your Hospital/Trust is paying your registration fee, please pass the completed application form to the relevant person for forwarding with payment.

To ensure that bookings are processed correctly, it is essential that the booking form shows the code number, title and date of the event being booked, e.g. C81 – How to Teach: Small group teaching 20 June 2002.

All courses and meetings are open to all grades of anaesthetist (unless specifically stated otherwise). Bookings will be accepted on a first come first served basis. When a course or meeting is full this will be publicised on the College website. For several weeks before major meetings, details of vacancies will be available on the Courses and Meetings Department ansaphone.

 Fees and cancellations
Payment for all College courses and meetings can be made by Sterling cheque, payable to ‘The Royal College of Anaesthetists’, Switch, or Credit Card (Mastercard/Visa/Delta).

Notice of cancellations must be given in writing to the Courses and Meetings Department at the Royal College of Anaesthetists at least ten working days before the course or meeting commences in order to qualify for a refund. All refunds are made at the discretion of The Royal College of Anaesthetists and are subject to a £25 administration fee. Delegates cancelling after this date will NOT be entitled to a refund unless the Royal College of Anaesthetists considers there to be exceptional circumstances that would warrant a refund.

Accommodation
Hotel information will be sent to you on receipt of your application.

Application forms
Completed application forms should be returned to the: Courses and Meetings Department, The Royal College of Anaesthetists, 48/49 Russell Square, London WC1B 4JY  switchboard 020 7813 1900  ansaphone 020 7813 1888  fax 020 7636 8280  email educ@rcoa.ac.uk
PLEASE COMPLETE THIS FORM IN BLOCK CAPITALS USING BLACK INK

This form is to be completed in conjunction with the programme for Courses and Meetings.

If you wish to apply for more than one meeting, please photocopy this form and use one form per application. Please state below the name and code of the meeting.

This form should be returned to:
Courses and Meetings Department, The Royal College of Anaesthetists, 48/49 Russell Square, London WC1B 4JY

Switchboard 020 7813 1900  ansaphone 020 7813 1888  fax 020 7636 8280  email educ@rcoa.ac.uk

Name of meeting__________________________________________

Registration fee: ** ___________ CODE: ___________

Surname: ____________________________________________  Forename 1: ___________________________________________

Forename 2: __________________________________________  College reference no. (if issued): ___________

Address line 1: _____________________________________________________________________________________________

Address line 2: _____________________________________________________________________________________________

Address line 3: _____________________________________________________________________________________________

Town/City: ___________________________________________  Country: _____________________________________________

Postcode: ___________  This address is (tick ONE only):  ___________ Temporary  ___________ Permanent

Date of birth: ___________

Telephone number (including STD code): __________________________________________________________________________

Fax number (including STD code): ______________________________________________________________________________

email address: _____________________________________________________________________________________________

Present appointment and hospital: ________________________________________________________________________________

Dietary requirements: __________________________________________________________________________________________

Payment can be made by Sterling cheque, made payable to The Royal College of Anaesthetists, or by credit card below:

Please charge my credit card:  ___________ Visa  ___________ Delta  ___________ MasterCard  ___________ Switch  Total Remittance: ___________

Card number: _________________________________________________________________________________

Expiry date: ___________  Issue No (Switch only): ___________  Start date (Switch only): ___________

Cardholder’s signature: ____________________________________________  Cardholder’s name: ____________________________________________

**Retired Fellows, paying the retired Fellows subscription rate, are permitted to attend College meetings at half price.
The Cyber Medical College
A vision for eLearning
(www.cybermedicalcollege.com)
Professor G N C Kenny, Member of Council

The Cyber Medical College, originally founded by the Royal College of Physicians and Surgeons of Glasgow (RCPSG), was established as a not-for-profit charity in September 2001 with the RCPSG and the Royal College of Anaesthetists (RCA) as founder Educational Members. The Anaesthesia pages of the Cyber Medical College were officially launched at the College Tutors’ meeting in Manchester on 3 July 2003.

Why a Cyber Medical College?
CEPD is a requirement of good medical practice and one of the objects for which the RCA was incorporated is to ‘educate medical practitioners to maintain the highest possible standards of professional competence in the practice of anaesthesia …’. Creating new educational material is expensive and time consuming but the internet offers a cost efficient and effective way to utilise existing materials. However, the growing body of information available on the internet is time consuming to identify and there is little or no quality assurance of accuracy or relevance. The Cyber Medical College aims to become the UK’s primary ‘portal’ to quality assured, internet sourced, clinical and professional learning resources.

What is the Cyber Medical College?
The Cyber Medical College is an educational facility that reduces the time spent searching for and accessing suitable learning material by linking users to appropriate resources. Easily navigated, career-orientated pathways lead the user to reliable, relevant, peer reviewed materials appropriate to the stage of their development. Five main ‘portal doorways’ lead users to information on:

- Learning – access to a wide range of learning resources, including tailor-made material where editors have identified gaps in existing resources. Learning ‘assets’ are provided in a variety of formats including URLs, HTML files, Adobe Acrobat files, PowerPoint presentations, video and audio files, image banks, and discussion groups.
- Organisations – links to relevant organisations and societies worldwide.
- Information – the history of medicine, ethics, telemedicine libraries etc.
- Resources – search engines, medical media services, useful tools etc.
- Patients – a trusted and reliable information source for patients.

Who’s it for?
The long-term objective of the Cyber Medical College is to provide ‘portal doorways’ for everyone working in healthcare – doctors, dentists, nurses and midwives, allied health professionals, complementary therapists, pharmacists, supporting health practitioners and the next generation of would-be practitioners. This ambition will only be realised through mutually beneficial relationships between a large group of educational and professional bodies. In the meantime, users are themselves urged to contribute and recommend resources that they have found useful. The potential benefit for healthcare workers in the developing world being able to link with and learn from their colleagues across the world opens up important channels for improved healthcare. Patients can also gain considerable benefit and re-assurance from the information contained within the ‘patients portal’.

What does it cost?
Access to the Cyber Medical College is free to the end user.

Who is involved?
Medical Royal Colleges, professional organisations and education providers can become Educational Members of the Cyber Medical College. Educational Members contribute resources to the project, including their own learning material, thus allowing all users to benefit. By working together the costs of providing online learning can be shared, unnecessary duplication avoided and valuable resources conserved. In partnership with the RCPSPG, the RCA is supporting the early stages of development while other relationships are being developed. The service is intended to remain free to the end user, so alternative funding sources must be found to allow substantial
Safe sedation of patients on ‘fixed’ surfaces

An important recommendation of all guidance on safe sedation practice is that the trolley, or other structure, on which patients are managed should be capable of being tilted into a head-down position to augment venous return in the event of cardiovascular collapse. This recommendation was reinforced in the UK Academy publication Safe Sedation Practice.¹ However, it would appear that it is not possible to tip CT and MRI scanning equipment in this way, and that this restriction applies to many angiography tables as well. Tilting angiography tables are available, but cost about £12,500 more than the standard equipment, and technical issues may make it impossible to provide the facility in scanning equipment. The following recommendations are proposed to deal with this issue:

1 When angiography tables are being installed or replaced, careful consideration must be given to whether they will be used for sedated patients, and whether the additional expense is appropriate.

2 In other situations, all workers must be aware of the lack of a tilting facility, and alternative measures must be available to allow venous return to be augmented in an emergency.

3 Simple elevation of the legs above the level of the heart will ensure this, and can be achieved by placing pillows or a foam wedge beneath the legs. Such materials must be kept available immediately where technical difficulties prevent tilting of the surface on which patients are sedated.

Dr A Chalmers for The Royal College of Radiologists, Dr A Kenny for The Royal College of Physicians, and Professor J A W Wildsmith for The Royal College of Anaesthetists

Reference

The Chairman of a Trust Drug and Therapeutics Committee has recently asked the College whether prescription drugs given during an operation should all be recorded on the hospital drug prescription sheet, or if it is satisfactory to use the anaesthetic record alone. The request followed a potentially serious incident when a ward doctor re-prescribed a drug given shortly before in theatre. Like most of his colleagues it was not his routine practice to look beyond the hospital drug prescription sheet. We offer our view.

The background
An anaesthetic sheet is a record of 'what happened'. It includes all kinds of events, not just 'drugs administered'. While regarded as having the status of a prescription sheet, the anaesthetic record is designed to include drugs inhaled, such as sevoflurane, and drugs injected without being formally prescribed.

The hospital drug prescription sheet is different, because it is an authoritative direction written by one person, who 'decides', to another who 'administers'. The prescriber here is not usually the administrator.

Some drugs however, given by the anaesthetist during surgery, for example opiates or gentamicin may be relevant later.

Some options
1 All drugs given during the time that the anaesthetist is the administrator should be clearly recorded on the anaesthetic record only.

   This stands the test of time, 'we do it that way', and is simple. Anaesthetists should spend less time recording what they do and more time in direct patient care: transcription to another chart impedes this

   However, other hospital practitioners can't easily follow or even be expected to understand anaesthetic records.

2 Every drug the anaesthetist gives is recorded on the ward prescription sheet.

   We include this if only to dismiss it for two reasons. The ward prescription sheet is not designed to record anaesthesia, and to record all anaesthetic drugs on it would add to the paperwork burden, possibly to the detriment of care provided by the anaesthetist to the patient.

3 All drugs that might be thought relevant to those looking after a patient in the first few hours after an anaesthetic are recorded on both the anaesthetic record and the ward prescription sheet. (On the whole it is likely to concern opiates and antibiotics.)

   This would help to comply with our duty of effective 'handover', but calls for individual judgement, which we support.

   We favour option 3, but irrespective of this we should continue to record all 'anaesthetic drugs' on the anaesthetic record. For practical reasons we suggest that that is the best place to record intravenous fluids.

   This topic seems to be important enough to be added to the Professional Standards FAQs on the college website, as reproduced below.

Question
Should prescription drugs given during an operation be recorded on the hospital prescription sheet or only on the anaesthetic record? (The question followed a potentially serious incident when a ward doctor re-prescribed a drug given shortly before in theatre. Like most of his colleagues it was not his routine practice to look beyond the hospital prescription sheet.)

Answer
Anaesthetists must record all drugs administered during anaesthesia on the anaesthetic record. However, good practice suggests that any drugs that might have serious implications in the postoperative period should also be recorded on the prescription sheet or similar document used in the ward, such as a pain chart. In practice this question is likely to refer mainly to opiates and some antibiotics. Anaesthetists should also be aware of any drugs prescribed by ward doctors immediately before surgery, such as heparin.

The question emphasises the importance of good communication between anaesthetists and recovery staff, the need for a clear handover and the value of a postoperative pain management team.
Trainees in the UK quite often spend some time training outside the UK. While the majority go to other developed countries with well established training programmes, a few may wish to go to a third world country. This may be both for altruistic reasons as well as for gaining first hand experience of working in a totally different environment, with different disease patterns, and with limited facilities. Such experience may also be valuable in gaining leadership and organizational skills.

The College is often asked if this period of time can be recognised for training purposes. All training overseas requires prior approval if it is to be considered towards CCST time but in the case of third world countries, it is essential that the trainee contacts the College in good time before embarking on such a course. This contact can be with the Training Committee or the International Relations Committee. The Training Committee of the College needs to consider these requests on an individual basis; it may therefore take longer than more routine attachments to established overseas training programmes. Trainees should only consider going to such places after having completed the SpR 1–2 Competencies. The trainee should discuss the proposed training with the Regional Adviser prior to contacting the College. The College will need to receive a letter of approval from either the Programme Director or the Postgraduate Dean, together with one from the hospital where the trainee is going.

The College will take the following into consideration on receipt of such requests and will need to receive as much written information as possible about training and supervision.

**Work plan and training**

The trainee should check what they will be doing there. It is likely that the training offered in such a place will not match the UK programme but it may still be acceptable as long as there is a clear plan of work. It is important that the type of cases and the likely amount of work to be undertaken are known. It makes it more worthwhile if there are elements of audit, teaching and possibly research. This visit may be an opportunity to collect data about management of such cases as are not commonly seen in the UK. It is obviously of benefit if the type of experience gained is different from that in the UK.

**Supervision**

One of the important elements of the training is that it is supervised. Often the trainee going to a third world country may be relatively senior and expected to carry out work without direct supervision and indeed, to supervise and train others. The ideal arrangement is where there is a credible local supervisor who is familiar with the criteria of assessment but this may not always be possible. Therefore, some arrangement needs to be made for regular review of the trainee's work and for support and guidance. This has been done successfully by email to a (distant) supervising consultant in the UK. Other supervisory arrangements such as by fax and by post have not been tried but their merits or otherwise could be considered.

As in the UK, it is paramount that the trainee keeps a record of cases for their log book and of their other activities, be these in the theatre, the A&E department or in teaching, audit and research. Specifically, experience gained in the use of novel anaesthetic techniques or equipment should be highlighted. The College will also wish to know the contribution made to training and skill development of local workers. The log book will be an important part of the assessment when the trainee returns to the UK. The trainee will be expected to submit a full report of their experience. This, together with the report of the supervisor (local or distant in the UK), will be considered by the Training Committee, in order to determine whether working in the third world country has proven to be worthy of counting towards CCST training time.

**Other considerations**

While the important consideration for the trainee may be whether the time spent in a third world country counts towards a CCST programme, he/she needs to consider very carefully other aspects of working in a third world country. Although these may seem obvious, they should be thought about carefully before making a commitment.

**Salary**

The trainee must consider if they will be paid enough for their required living standard. The trainee should consider any ongoing financial responsibilities in the UK such as payment of mortgage etc. They should think about the advisability of continuing superannuation contributions.
This may need some discussion with the employer in the UK. The cost of travel to the third world country needs to be planned for.

**Family**

Is the trainee's family going to accompany him/her? There will be the expense of temporary relocation for the whole family. Financial security should be maintained if the family is to remain behind in the UK.

**Visa**

The trainee needs to check with the Embassy/High Commission of the country about the visa requirements and the right to work for a salary if it is being paid by the local hospital.

**Knowledge about the place**

It is obviously important to know about the climate (temperatures, rainfall etc) of the place where the trainee is intending to go in order to take suitable clothing.

**Accommodation**

Arrangements should preferably be made before leaving the UK at least for temporary accommodation. The standard may not be the same as they are accustomed to in the UK.

**Health requirements**

It is important to check if any vaccinations are required before going to a third world country. Travellers are advised to have inoculations and/or other prophylaxis for typhoid, malaria, yellow fever, hepatitis, polio etc. Advice should be taken from the Malaria Reference Laboratory (24 hour tel: 09065 508908 – Premium rate at £1 per minute; Health Professionals tel: 020 7636 3924) or Health Protection Agency tel: 020 8200 6868). Arrangements for the provision of healthcare while living in the third world country should be made before leaving the UK (illness can happen without warning!). It is also important to know about the possible health risks in the country where the trainee is intending to go. (Useful information from the Department of Health and Centre for Disease Control and Prevention websites: www.doh.gov.uk/traveladvice/index.htm, www.cdc.gov/travel/). There may be other bodies such as the BMA who may be able to give additional advice.

**Other considerations**

It is advantageous to find out a little about the local customs, religion, taboos etc. It is useful for integrating within the community and the work place.

It is also useful to check with the Foreign Office about the advisability of travelling to a particular destination (this will be superfluous in most cases but is advisable in the presence of a conflict in the area or nearby).

Although this appears to be a daunting list to consider, the College wants to encourage a realistic approach to what can be a very rewarding experience.

**Acknowledgement**

The author is grateful to Dr Griselda Cooper and members of the International Relations Committee for their constructive comments.

Information about opportunities for work in the developing countries may be obtained from the following websites:

- www.msf.org
- www.vso.org.uk
- www.ihe.org.uk
- www.merlin.org.uk
Desire

I’ve something to confess. I’m typing this on a computer without a licence. As computers go it’s not desperately speedy. Not having a licence isn’t something that constantly gnaws at the vitals of my conscience. However, like many pedestrian users, I worry about the number of crashes that occur in our country every minute of every day. All that information unnecessarily lost. A dreadful waste! Actually, that’s not really my main confession.

As yet fondling your mouse without a licence is not an offence, but time will be perhaps when the use of NHS mice without one will be a disciplinary matter. And the licence you’ll require is a European Computer Driving Licence or ECDL. Those who’ve trained in India, Australia, New Zealand, Pakistan, the USA, Hong Kong or Singapore will find another hoop to jump through.

What I’d like to confess to is having lessons so that I can take the test to get the licence. After that, all European mice are fair game. What on earth, most of you are probably thinking, is he on about?

Well darlings, you simply must get with the program(me). Just ask your local SCATA member about the six levels of information technology implementation for the NHS. It’s all happening out there, and if you’re not careful you’re going to be left woefully behind. Certainly this was the feeling I had after an invigorating talk by one of SCATA’s finest at a regional trainees’ meeting. Actually, there’s more.

You know when you’re a trainee, and there’s not long left. A year perhaps. And you’ve dusted off the old CV. In the solar glare of imminent consultant post application it sort of looks insubstantial and a bit flimsy. You’re probably going to have to leave out that paper you were about to send off just before SpR interviews that still appears in your quarter-page Publications section along with a letter to The Journal of Hyperbaric Laryngoscopy. The ALS instructor courses always managed to fall on the weekend of you’re chum’s hen/stag party, etc. etc. Well fear not! Fill the space with a unique qualification that will be the envy of your peers, and have the panel nodding wisely.

Indeed, there are many reasons why I found myself surfing the net looking for more on the ECDL.

The fitting room

And then there it was, on an NHS website, and it was FREE! Not only was it FREE, but it was something you did yourself via an internet connection. Not only that but you had THREE YEARS to complete the seven modules (although they recommended a year). I clicked the email hypertext link to my nearest purveyor of fine ECDL knowledge and declared my interest. By the miracle that is modern computing, a month later I had my reply: I was to attend a computer training room on any one of certain days between certain times in the more derelict part of our hospital to be given my username and password.

Well it wasn’t quite as exciting as joining the secret service, but I was sent a highly informative dossier all about the ECDL and how it could one day be mine. Prior to being given my alias I had to do a short test. Oh no, they won’t give just any old Tom, Dick or Harry a username and password. You have to know how to switch on a computer, open a program and close a program with a mouse, and switch off a computer before you’re allowed into the fold.

I must reassure those of you who have never seen a computer, or a mouse, that training is always at hand to bring you up to speed. Indeed, NO ONE is excluded from the ECDL programme. It will become one of the handrails of the NHS skills escalator!

Wearing it

Anyway, there I was, all ready for covert operations on the Trust’s computers in all that free time that my days are so liberally laced with. I logged-on and found they’d set me up with my very own learning website. The instructions, if I’d followed them, would have been foolproof. Unfortunately I dived straight in and had gone a fair distance before realising I’d missed something important.

On returning to the start it became apparent, on closer reading, that for each module there’s a handbook to download onto your hard drive, and another folder packed with example files that you need for the lessons that make up each module. At the start of each module you are invited to do a light hearted, 50 question, multiple choice quiz. This assesses your knowledge in different areas and allows the program to recommend which parts of the module you should work through, and which parts you can probably skip. Each module is made up of different lessons. Each lesson consists of the examples, an exercise, and then a quiz.
The results of each little quiz appear on the module ‘homepage’ next to each lesson’s name, and you’ll be glad to know there’s no negative marking. You also get a ‘tick’ next to each lesson once you’ve worked through the exercises.

It is awfully well done. Someone, or some people, has spent an awful lot of time designing the whole thing. It is very well thought through. The only problem with it is this …

Regret
I’m not into machine code or anything like that, but I do know how to make the letters bigger or smaller. I thought the training for the ECDL would make me a better driver. It does, of course, but the cost is having to go through it properly, without skipping bits. The temptation is to say ‘know that,’ ‘know that,’ ‘know that,’ and just do the stuff that makes you think ‘what?’ The reason why this is so tempting is TIME. To do the whole thing properly does take TIME.

About 70 hours, they reckon. Realistically even finding an hour every week is difficult, especially if you’re also working on a case report for Today’s Anaesthesia and Critical Care Practitioner. And to actually get the actual real ECDL I have to return to the derelict part of the hospital and sit a 45 minute multiple choice EXAM for each module!

So it’s not all guns and fast cars, and when you finally look at yourself in the mirror you may well feel you look a bit silly in the summer heat.

But I’m going to stick with it because my projected CCST date is not for another six months, and I really do want to learn how to use spreadsheets and databases properly, and because last week I learnt how to mail merge and I bet you can’t do that!

The European Computer Driving Licence
(Or, the dry, dull, boring bit about what it’s all about)
Dr A B H Lim, Staff Anaesthetist, Royal United Hospital, Bath

So, what is it that Nevil has been hiding all this time, secreted in the bowels of his hospital IT department? The European computer driving licence is an internationally recognised qualification that is designed to help individuals to develop their ability to use computers. It is designed as a modular course with seven key areas of competence which are:

1. The basic Information Technology concepts.
2. How to use a computer and manage files.
3. How to use a word processing package.
4. How to use a spreadsheet package.
5. How to use a database package.
6. How to create presentations.
7. Information and communication.

The aim of the course is to allow anyone to learn the basic skills (yes, even you, Nevil!) necessary to become competent and confident in using a computer and all common business and office application software. As the NHS increases its dependence on information technology and computers, more and more information and data pertaining to both work and patients will be stored on computers. This means that all NHS workers will need to have the ability to use computers in order to do their jobs safely and efficiently. The ECDL is being used as the reference standard for IT skills for all NHS staff, as laid out in the lifelong learning framework ‘Working together/Learning together.’

As a benefit, this drive to increase computer literacy in the workplace will also help at home, as computers are becoming ubiquitous here as well, and the knowledge gained about computers and application software is not confined to work. More and more schools, for example, are getting children to use computers and the same software in order to do schoolwork as well as presentations.

To start an ECDL, there is no need to have any previous experience or knowledge of computers or computing. Centres that run the course will be able to help applicants to decide what level of study is needed. Several learning options are available, from tutor-led courses and self-study books to on-line courses. The available study programmes are:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full ECDL</td>
<td>Study and complete all 7 modules.</td>
</tr>
<tr>
<td>ECDL start</td>
<td>Study and complete modules 2 and 7 plus two other modules then complete the final three modules at a later date for the full ECDL.</td>
</tr>
<tr>
<td>ECDL fast track</td>
<td>If you are already skilled and want the qualification, this is a quick route to the tests.</td>
</tr>
<tr>
<td>Getting started</td>
<td>This programme covers the basics of using a keyboard and mouse, how to handle floppy discs and CD-ROMs etc.</td>
</tr>
</tbody>
</table>
As a guide, listed below are some estimates of the time that an individual needs to put in at the various different levels, to complete the course.

<table>
<thead>
<tr>
<th>Learning package</th>
<th>Study Time</th>
<th>Test time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Started</td>
<td>12 hours</td>
<td>No test</td>
</tr>
<tr>
<td>ECDL Start</td>
<td>28 hours</td>
<td>4 hours</td>
</tr>
<tr>
<td>Full ECDL</td>
<td>65 hours</td>
<td>7 hours</td>
</tr>
<tr>
<td>Fast Track</td>
<td>Minimal</td>
<td>7 hours</td>
</tr>
</tbody>
</table>

So, trying desperately not to sound too ‘anoraky’, I have to confess that I am not doing the ECDL!! The reason? Apart from the time, (even the seven hours needed for the fast track option) my trust IT department has decided that all us naughty doctors need to have at least one indoctrination, sorry introductory session at our local teaching centre and being the contrary person that I am, I baulk at being told that I have to go somewhere before I can start on what is supposed to be a voluntary, on-line course that is supposed to be done in your own time or in protected time (with the agreement of your local line manager). No doubt the legions of rulemakers will deem me unfit to use an NHS computer in the near future, but somehow, I think that I won’t really mind. If, however, they decide to run this properly, I might just change my mind and see what the fuss is all about!

AS WE WERE ...

Burglars and anaesthetics

The recourse to chloroform by burglars may be an advance on the use of the jemmy, but the anaesthetic is scarcely likely to be skilfully or safely administered by Bill Sykes – therefore it is necessary to protest against the innovation. We will not hastily jump to the conclusion that the device has actually been adopted. The mere fact of waking with pains in the head in the morning following a Christmas Eve is not final proof of the fact that an anaesthetic has been administered. However that may be, we venture to think the arrangements of any house must be defective into which a burglar can enter in such leisurely fashion as to be able to obtain access to a bedroom, and quietly place two persons in a state of unconsciousness by the use of an anaesthetic before he proceeds to ransack the premises! Surely precaution may easily be taken against such an intrusion.

Reference
The Lancet, 7 January 1882, page 29.

What stimulated this editorial annotation can only be guessed. Did something go missing in suspicious circumstances? A Victorian insurance scam? Or just post-anaesthetic automatism, as in The Moonstone.

David Zuck
History of Anaesthesia Society
Some seventy members of The Senior Fellows Club met at the Grange Holborn Hotel. Peter Simpson gave a short address reporting on the substantial achievements over the last three years by Professor Hutton in his capacity as President and as Chairman of the Academy of Royal Colleges. Dr Simpson mentioned the current discussions about the possibilities of non-medically qualified anaesthetists being introduced into the United Kingdom using the Dutch model. His final comment was that the College was still seeking some enlarged premises. The Group thanked him and wished him well on taking up the Presidency in June.

Dr Keith Thomson, a consultant anaesthetist from Basingstoke, described his experiences of 'Airway Adventures in Africa'. He originally went as a medical student but subsequently worked there for considerable lengths of time. In recent years, this work was with the Mercy Ships Organisation. They have a liner converted to a hospital ship that visits various ports in West Africa. There they provide much needed surgical services. He illustrated the variety of work done. It includes patients with congenital abnormalities such as harelip and cleft palates, those with massive tumours around the jaw and other major airway problems. He described how the anaesthetic management has developed from initial tracheostomy under local anaesthesia or inhalation induction and blind nasal intubation through the use of the laryngeal mask airway to the use of fibre optic endoscopy and sevoflurane. The charity needs more support and also offers splendid chances for anaesthetists to gain skills in airway management of major problems that are not so common in the United Kingdom. If any anaesthetists are interested they may contact Dr Thomson who can be found at keith.t2@ukonline.co.uk or the Mercy Ships organisation at info@mercyships.org.uk.

Professor Michael Rosen followed by giving a summary of the work of the World Federation of Societies of Anaesthesiologists in setting up training programmes for anaesthetists from the third world. The scheme is now running and has started to bring trained doctors to give anaesthetic care in a number of countries. He noted that one distinguished retired colleague had decided that he would subscribe his annual winter fuel allowance to the charity. Professor Rosen can be contacted through the Association of Anaesthetists, the WFSA, the College or his home (tel 029 2075 3893) if anyone needs further information.

The meeting ended with lunch. The next meeting is booked for Thursday, 23 October 2003 (see below) when the speaker will be Dr David Foster who is to talk about the R101 disaster.

Finally, can I remind readers that the Club is open to all anaesthetists on the College’s list who have retired? Fellowship of the College is not mandatory. If you are not on the list, please contact the Membership Department at the College.

The next Senior Fellows meeting will be held at BMA House, Tavistock Square, London WC1 on 23 October starting with coffee at 11.00 am and finishing with lunch. The registration fee is £30. However, please note that places are limited.

Further details are available from Mrs Eva Lazari in the Membership Department tel 020 7908 7323 email elazari@rcoa.ac.uk
James Bovill qualified from the Medical School at the Queen’s, Belfast in 1966. He was one of a select group of people who during the 1970’s carried out studies on drugs related to anaesthesia under the guidance of the late Professor John Dundee. He published several well conducted clinical studies on ketamine during that time; these were submitted as a thesis to the Queen’s University resulting in the award of an MD with honours to Dr Bovill. Dr Bovill was appointed a Consultant Anaesthetist in 1972.

Dr Bovill moved to Amsterdam to join Professor Doreen Vermeulen-Cranch as a Senior Lecturer in 1977 and within a few years was appointed to his current post of Professor of Anaesthesiology at the University of Leiden in 1985. Professor Bovill has established a Department in Leiden with a high reputation. While he has a high reputation as a pharmacologist, he is also an excellent cardiac anaesthetist. He is an excellent teacher and has been at the forefront of development of the Leiden Anaesthesia Simulator.

Pharmacology of anaesthesia is Professor Bovill’s forte; he has published more than 300 original and review articles in anaesthesia and pharmacology journals. Apart from ketamine, Dr Bovill has published pioneering work in pharmacology and pharmacokinetics of
intravenous anaesthetics and opioids. Professor Bovill is a member of the editorial board of Anesthesia and Analgesia and the Editor of its Anaesthetic Pharmacology section.

Professor Bovill has therefore contributed towards both the art and science of anaesthesia and is an eminent person deserving of being a Fellow of our College.

**Professor R K Mirakhur**

Mr C Bray

Clive Bray has been a friend to our College and specialty for many years. After qualifying in pharmacy from the University of Aston in 1971 he first worked as a hospital pharmacist, and then, via St Georges Hospital and the University of Bath he made his way to being appointed to the post of Senior Pharmaceutical Officer at the DHSS in 1981. In 1983, a change of career direction saw him becoming the Principal Professional and Technology Officer for Life Support Equipment where he enjoyed his first links with our specialty. Since then he has been a member of the AAGBI Safety Committee. Over the next 17 years he continued to advance in seniority till in 2000 he became the Director for Device Technology and Safety at the Medical Devices Agency.

During these years we have much to thank him for. He has been actively involved in developing standards for anaesthetic and respiratory equipment both in UK and Europe and has chaired and served on many committees concerning such subjects as:

- Safe handling of medical gas cylinders.
- Anti-static requirements.
- Safe use of lasers.

- Management of infusion systems, and
- Alarms and clinical monitors.

More recently he has worked closely with the College and specialty on a number of Safety Action Bulletins and his readiness to seek professional opinion so that what is issued gives common sense, practical, advice is much appreciated. We look forward to the College’s continued association with Clive and his department. I hope President that with these achievements behind him, you find Clive Bray a worthy recipient of the Humphry Davy Award.

**Professor P Hutton**

At a meeting of Council on **Wednesday, 16 July 2003**, the following Regional Advisers in Pain Management (new created posts) were approved:

**Yorkshire**
Dr K H Simpson, St James’s University Hospital, Leeds

**North and North East Scotland**
Dr K A W Cranfield, Aberdeen Royal Infirmary

**East of Scotland**
Dr D H F Hartmann, Ninewells Hospital, Dundee

**South East Scotland**
Professor I Power, Edinburgh Royal Infirmary

**South West**
Dr M B Taylor, Derriford Hospital, Plymouth

The following **Deputy Regional Adviser** was appointed:

**Mersey**
Dr A G Head-Rapson, Southport District General Hospital (in succession to Dr A R Bowhay)

The following **College Tutors** were appointed/re-appointed (**re-appointments are marked with an asterisk)**:

**Yorkshire**
Dr P R Clarke, Pinderfields General Hospital, Wakefield (in succession to Dr H A O’Beirne)

**South Thames (East)**
Dr C H Taylor, Kent and Sussex Hospital, Tunbridge Wells (in succession to Dr L N Baldwin)

**Nottingham and Mid Trent**
Dr R J Erskine, Derby City Hospital (acting College Tutor for nine months with effect from 1 September 2003)

The following names were approved for the **Diploma of Fellow** of the College (University of primary medical qualification in brackets):

- Achawal Madhuvanti Shailendra (Poona)
- Ackland Gareth Lewis (Oxford)
- Adams Ferdinand Ricardo Alexander (London)
- Agarwal Seema (Birmingham)
- Allan Gavin David Lapraik (London)
- Allen Matthew James (London)
- Anwar Mudasir (Glasgow)
- Arawwawala Dilshan Prassana (Manchester)
- Armstrong Philippa Mary Christine (Dundee)
- Arora Anand (Delhi)
- Bailey Sarah Grace (London)
- Balasubramani Veluchamy Maruthu (Bombay)
- Balasubramanian Shyam Sundaram (Tamil Nadu)
- Baldam Amanda Louise (Southampton)
- Baranidharan Ganesan (Madras)
- Barlow Nicholas Percy (Oxford)
- Barnes Richard James (Manchester)
- Barrios Alejandro (Medico Colombia)
- Batchelor Nicholas George Peacock (Leeds)
- Bell John Charles George (Southampton)
- Berry Matthew lain (Nottingham)
- Best Thomas Bernard Nicholas (London)
- Bhaskar Arun Kumar (Kerala)
- Branfield Lorien Fay (Cape Town)
- Brown Rachel Emma (Bristol)
- Brown Alistair Robert (London)
- Butwick Alexander James (London)
- Caesar Claire Grace (Edinburgh)
- Chapman Gordon Allan (Pretoria)
- Chapman Richard James (Oxford)
- Chellapuri Ramesh Sai (Bangalore)
- Cheyne Deanne Ruth (Witwatersrand)
- Chhatwani Asha (Rajasthan)
- Chitre Dharni Sadanand (Mumbai)
- Clapham Peter (Glasgow)
- Collighan Neil Talbert (Edinburgh)
- Connelly Karen Ann (Newcastle Upon Tyne)
- Cook Martin James (Birmingham)
- Cowlishaw Phillip James (Birmingham)
- Cross Yekaterina Y (Vrach St. Petersburgh)
The College would like to apolgise to Dr Claudia S Rebmann for incorrectly listing her name under the North West Region in the list of trainees approved for the CCST in the July issue. Dr Rebmann is in fact a trainee from the Mersey Region.
Vacancy for a Research Strategy Development Officer

The Royal College of Anaesthetists wishes to recruit, for one-year, a part-time (one day per week) Research Strategy Development Officer. The post will be based in the Training and Examinations Directorate of the RCA, reporting to the Chairman of the Research and Academic Committee via the Training and Examinations Director. The person appointed must be able to work from his/her own base when their presence in the College is not required.

Background
This appointment is in response to an RCA Council decision to commission a review of academic anaesthesia, in all its aspects (research, undergraduate teaching, postgraduate training and promotion of clinical excellence) with three aims:

- to sustain the further development of academic anaesthesia;
- to detail academic anaesthetists’ contributions, actual and potential; and
- to consider the mechanisms by which departments can be organised and funded, including consideration of inter-departmental links and individual career structure.

Salary
Negotiable, but the equivalent to 2/11s of a NHS consultant salary, plus travel and other costs. It may be possible that the salary could be paid in the form of a ‘research’ grant to a University Department.

Outline of duties
- To be a member of and advise the College Working Party on Academic Anaesthesia.
- To review existing literature on the roles and current difficulties facing clinical academics.
- To survey all aspects of UK academic departments (research, undergraduate teaching, postgraduate training and promotion of clinical excellence) to gather information on current activities and different models of provision.
- To consult with those bodies which, in one way or another, ‘purchase’ the services of academic anaesthetists.

Person specification
An anaesthetist of consultant/senior lecturer status with experience of academic anaesthesia who demonstrates:

- Enthusiasm for anaesthesia, critical care or pain management.
- Personal commitment to research and teaching in anaesthesia.
- A recognition on the current position of academic anaesthesia and its career structure.
- Awareness of the current training programme for the CCST in anaesthesia, particularly the academic components.
- An ability to work flexibly and without direct supervision.

For more details of the post please contact Mr David Bowman, Training and Examinations Directorate via tel 020 7908 7315 or email dbowman@rcoa.ac.uk. If you would like to apply for this post, please send a CV and covering letter to reach the College by Tuesday, 30 September 2003.

Postgraduate Medical Education and Training Board (PMETB)

In October 2003 PMETB will come into existence to take over the functions currently exercised by the Specialist Training Authority (STA), e.g. approving training programmes, awarding CCSTs etc. There will be a twelve month transitional period before the Board formally takes on the work of the STA. During this time any new work which requires to be undertaken as a result of the PMETB legislation will be the responsibility of PMETB, but the existing functions of the STA will continue to be discharged by the STA, i.e. both organisations will run in tandem for one year. Whilst in the medium term this may require changes to the College’s working practices Fellows and trainees should notice no difference.
Correspondence

Please make your views known to us via email [preferred option] to: bulletin@rcoa.ac.uk, or by post accompanied by an electronic version on floppy PC disk, preferably written in Microsoft Word (any version), to: The Editor, c/o Mrs Mandie Kelly, Editorial Officer, The Royal College of Anaesthetists, 48/49 Russell Square, London WC1B 4JY. Please include your full name, grade and address.
All contributions will receive an acknowledgement. The Editor reserves the right to edit letters for reasons of space or clarity.

Fellowship examiners

Madam, – On perusing the Annual Report (2001–2002) it was encouraging to read that pass rates in both the Primary and Final FRCA were higher than I thought.

It was also interesting to read that the Examinations Committee encourages applications from a wide range of backgrounds (not quite sure what is meant by this) and that there was a good mix of gender, race and geographical variation amongst those elected. This is not patently obvious on looking at the photograph of the Primary Examiners – I suppose there is a sprinkling of females and ethnic minority examiners, and I am sure I could identify at least two examiners from the same hospital.

As we now live in so-called ‘transparent times’ I wonder if the College could publish a list of all the Examiners on the College Website. This should include a brief résumé with the following information: year and place of medical qualification, year of obtaining the Fellowship, College responsibilities (e.g. College Tutor), any teaching and other qualifications, and a list of recent publications of note. This would be most helpful to future applicants as they would then know what to aspire towards.

A Ravalia, Consultant, Kingston

Dr Andrew Mortimer, Chairman of the Examinations Committee replies: The College can only select examiners from those Fellows who apply and the number of applications from women and ethnic minority groups currently does not reflect their proportions in the specialty. That said, for several years now the quality of applicants from these groups has been very high and this has been reflected in their success rate in appointment as examiners. Between 2001 and 2003 33% of female applicants and 24% from racial minority groups were appointed compared to a success rate of 19% for white male applicants. The result has been that the number of female examiners increased from 11 in 2000 to 18 this year and examiners from racial minority groups rose from six to 11 in the same period; this is out of 113 examiners. These increases have been achieved without quotas or positive discrimination.

Examiners are appointed on merit, but other factors such as sub-speciality, location, type of hospital, special interests are then taken into account to provide a balanced pool of examiners reflecting the specialty. I am not surprised that Dr Ravalia spotted two examiners from the same hospital because to apply a quota of one per hospital would deny anyone else from that hospital the chance of becoming an examiner for ten years, but as far as is possible examiners are chosen from a wide range of hospitals all over the country.

Dr Ravalia makes an interesting point about the need for transparency and it will be discussed by the Examinations Committee at its next meeting. However, we will have to balance Dr Ravalia’s desire for aspirational role models against individual examiners’ rights to privacy.

NICE guidelines

Madam, – It is nearly a year since the National Institute for Clinical Excellence (NICE) issued guidance on the use of ultrasound locating devices for placing central venous catheters (CVCs).1 The recommendations have been seen by many as a requirement for universal use of ultrasound in elective situations and significant amounts of scarce NHS resources are being invested by trusts in order to comply with the guidelines. Nonetheless the guidance remains controversial. At a recent Association of Anaesthetists meeting the headline recommendation ‘2D ultrasound is the preferred method for insertion of CVCs into the internal jugular vein in adults and children in elective situations’ was the subject of a formal debate where it was rejected by a majority of at least five to one. The rejection of the guideline centred around the quality of evidence assessed by NICE and the limited applicability of the economic analysis for most situations in which CVCs are inserted. Given the margin of defeat of the motion, there is no reason to suppose that the opinion of this small sample is not at least partly representative of the specialty in general.

Practitioners may nonetheless feel coerced into using ultrasound guided CVC insertion by the threat of litigation. Indeed, a recent editorial in the BJA contained the statement: ‘Very soon, complications of central venous catheterization where ultrasound has not been used will be very difficult to defend in court.’2 Defence against the
th"e threat of litigation is a poor reason alone to change one’s practice, but in any case the statement is unfortunate as there is little evidence to suggest that it is actually true. The issue of non-compliance with clinical guidelines has been recently examined by David Hart, a barrister specialising in medical negligence, in an excellent editorial which is very much of general interest given the plethora of guidelines that we are increasingly faced with. In short, Hart states that a guideline has no automatic legal effect and failure to comply will not amount to negligence if there is a responsible body of medical opinion to support non-observance (the well known Bolam principle). The editorial contains practical information for those seeking to protect themselves from non-adherence to a guideline, including the importance for clinicians to show that they were aware of the guideline and took a considered clinical judgement not to follow it. In the case of the CVC debate this is not difficult, particularly given the supporting statement from the Royal College of Anaesthetists that ‘the landmark method is still an acceptable alternative, whether or not 2D ultrasound is available’.1

Despite this useful contribution, I remain disappointed with the role of the College in this whole episode, as was highlighted in our recent letter to the Bulletin.2 I wish to take issue with several of the points made by Dr Simpson, representing the College, in his reply.6 Although Dr Simpson states that the College had no opportunity to appeal against the guidelines before they were released, this is flatly contradicted by the NICE Appeals Process document which clearly states that ‘all the nationally based organisations involved in the appraisal process are provided with the opportunity to make an appeal … If appeals are rejected the draft guidance becomes final guidance and is issued to the NHS’.2

Secondly, Dr Simpson states that we implied that these were College guidelines. This was not our point, which was that although the College was involved with the process at various stages from submission onwards, this involvement appeared to consist mainly of representation by one individual, who seems to have been the predominant expert advising the Appraisal Committee. In the setting of a committee unfamiliar with CVC insertion, this appears to have allowed imbalance. It is entirely regrettable that there is no permanent anaesthetic representation on the NICE Appraisal Committee. Of course it is up to individuals to apply for the posts as Dr Simpson states, but nonetheless I believe that the College should take an active lead in encouraging this, since it is likely to be of benefit to our specialty. The CVC issue is an illustration of the difficulties that can arise from a committee making important decisions on practice with which they are not familiar.

It is hard to feel charitable about the process by which these guidelines have been foisted on our specialty. NICE is supposed to represent the epitome of evidence based medicine and we have a right to expect the highest standards from it, since it seeks to enforce changes in the way we practise. It is thus unforgivable when NICE deviates from the standards expected of the evidence which it is assessing. The CVC guidelines are at least partly based on an economic analysis which uses a model with a monetary cost for complications incurred.9 The most significant complication considered is inadvertent arterial puncture which is costed at £40 per event. The reference for this figure is cited as: ‘Boland A et al. A randomised trial to evaluate the clinical and cost-effectiveness of Hickman line insertions in adult cancer patients. HTA 2001’ (HTA being Health Technology Assessments). Though the paper is cited as having been published in 2001, it has still yet to be published and is not due to be until the end of this year at the earliest. We are therefore being asked to change practice on the basis of evidence that is not available for scrutiny which is, I believe, unacceptable. That the reference has been cited as having already been published is, to say the very least, unfortunate and reveals much about the quality of the appraisal process.

There is much to learn from this episode in ensuring that future guidelines affecting our specialty are assessed with more rigour. In the meanwhile, I believe that those who do not adhere to the published guidelines on CVC insertion have little to fear, but should nonetheless ensure that they protect themselves using the advice given by Hart.7

AM Cohen, Consultant, Bristol

References
The exam wot we took

Madam, – As one of those who took the two Part DA examination in 1953, I read with the greatest interest the article by Dr J S M Zorab and Dr D Zuck (Bulletin 19, May 2003) about the first examination for the FFARCS.

However, there are two points which need some clarification.

First, it is stated that there is no record of the number of candidates who entered the examination, but the report made by the Board of Examiners to the Council of the College of Surgeons, and approved by the Council on 14 January 1954, states: ‘52 candidates presented themselves for the Examination, 16 of whom acquitted themselves satisfactorily. One of the successful candidates has not yet complied with the regulations’. This candidate was Brian Hall Smith, and his Fellowship dates from 10 June 1954.

Secondly, all the time that the Faculty existed the board of Faculty was subservient to the council of the Royal College of Surgeons, so that the date on which a candidate became a Fellow of the Faculty was not the date on which he or she passed the examination, but the date on which the council approved the Minutes of the Board. In the case of the first examination, the report of the Board of Examiners, which was dated 10 December 1953, was not approved by the Council until 14 January 1954.

JG Fairer, retired Consultant, France

Dr David Zuck, co-author of the original article replies: Thank you for the feedback. It is nice to know that someone read our article about the first FFARCS examination with the greatest interest.

Dr Fairer’s knowledge of the archives is such that I am sure he is right.

Reality check – a response to ‘Training – what training?’

Madam, – Dr M Garfield is not alone in painting a bleak picture for anaesthetic training after the incorporation of New Deal into Junior Doctor contracts this August and the even stricter 58 hour residency rules that apply under European Working Time Directive from next August. Dr D A Saunders in his guest editorial expressed the manpower shortcomings of potential solutions, indeed a recent BMJ career focus on implementing EWTD produced no real answers. However, what is clear is that change is occurring and fast.

At my current trust we are introducing a rota that is New Deal compliant but needs another two doctors for EWTD compliance. Great if we can get the staff – but what happens if we can’t? Ultimately we and the other 480 acute trusts who cannot get the staff they need for EWTD may have to face reality and do the best they can within current resources.

These changes are predictable and have been for some time. However, we are fast approaching a nationwide emergency situation, and as experts in resuscitation we will be called upon to do the best we can with whatever we are presented with. Just as when the airway is obstructed we secure it, when breathing is inadequate we take over ventilation and just as we know the difference between resuscitation and maintenance fluids, my point is that we should take the same professional approach to the organisational challenges facing us as a profession.

As a profession what then is our airway? Is it hours, service or training?

While it is impossible to separate all three aspects I would suggest that hours are the trust’s lifeline to trainees and also the maintenance of their service. Hours and service then are the trust’s airway and breathing – not ours. Training is the airway that supports anaesthetic professionalism and in the future, rota changes that reduce hours while prioritising the out of hours service are ‘losing our airway’ – in order to maintain other people’s airways.

I believe we must collectively take responsibility for protecting our professionalism during this change process. The simple approach of swapping level 1 and 2 supervised hours for those hours of level 3 supervision with perhaps fewer training opportunities needs to be resisted. Essentially, when training hours become fixed, high quality training opportunities should be maximised. Perhaps some level 3 hours could be removed entirely with minimal training loss – evening maternity cover, for example. Conversely some level 3 hours could be upgraded to level 1 or 2 by judicious use of service grades, in which I include consultants, perhaps by including trainees in waiting or trauma list work.

I suggest that in terms of the analogy these ideas are more akin to the place of a laryngeal mask in a ‘can’t intubate, can’t ventilate scenario’ in maternity – in other words, better any airway than no airway at all or to complete the reversal of analogy - if training really is our airway, with hours and service secondary, then these are the types of...
organisational changes we could put in place to secure training, in a planned and manageable way so that when more staff become available, they secure a patent training airway in a living body of trainees.

**G Knox, Specialist Registrar in Anaesthesia, Blackburn Royal Infirmary**

**formerly Medical Advisor to the North West Regional Task Force on junior doctors hours and Deputy BMA representative to SWAG**

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**References**


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Madam, – Having read the Trainees’ Topics editor’s interesting exposure of the working patterns of junior anaesthetists, I wish to emphasize a few points of my own current shift system on ICU (Bulletin 19, May 2003).

I wholeheartedly agree that the restrictions placed on trainees on a mainly out-of-hours shift pattern are numerous. Working on a 30 bedded ICU in a teaching hospital for three months has meant there has been ample time off after a few long days and nights. Although this is accepted, I must add that unfortunately I am unable to remember the last time I was taught anything vaguely anaesthetic related and it certainly was not in daylight hours. It seems to be a ‘learn as you go attitude’ – if there’s time …

Secondly, because junior staff are now receiving adequate rest periods, the ICU (and I expect other areas of anaesthesia) are becoming mainly SpR/consultant led and a lot of the work remains on their shoulders. It disturbs me that I have only intubated one patient in the last three months (something that I am supposed to be the hospital’s expert on when on-call in a DGH and the SpR is tied up somewhere else!). Admittedly, large gaps in my general medical knowledge have been filled and I feel confident about inserting most lines but when it comes to showing off my log book at SpR interviews, the airway skills bit is sure to be rather thin on the ground.

Maybe the concept of three month sub-speciality blocks in our SHO training should be re-thought in view of Dr Garfield’s comment: ‘It is somewhat unbelievable that we have to look seriously at whether trainees are getting adequate experience in one of the fundamental components of anaesthesia – the safe management of the airway’. This surely leaves an important message – you can’t train us if we’re not there!

MA Semmens, SHO, Cardiff

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**Fellow of 50 years standing**

The College would like to congratulate Dr Charles Orr from Co Antrim, Northern Ireland, who informs us that he was granted the Fellowship in March 1953 and has therefore been a Fellow of the College for 50 years.
The Royal College of Anaesthetists invites applications for one of the two posts of Bernard Johnson Adviser in Postgraduate Anaesthetic Studies, which has become vacant on the retirement from the post of Dr Les Shutt.

The post holder will be principally involved with providing career advice and counselling to flexible trainees and advising the Training Committee on policy matters. There may, however, be some cross-over of duties with the other Bernard Johnson Adviser who oversees the College’s Overseas Doctors Training Scheme (ODTS).

Applications, including a letter explaining your reasons for applying for the post, a full CV, and the names of two referees, should be submitted to:

Mr Kevin Storey  
College Secretary  
Royal College of Anaesthetists  
48/49 Russell Square  
LONDON WC1B 4JY

before 30 September 2003. A job description is available upon request. The post carries a small honorarium.
The Mersey School
Anaesthesia and Perioperative Medicine
‘If you feed the children with a spoon, they will never learn to use the chopsticks’

Primary Prep Course – (OSCE/Orals)
19–26 September 2003 (Waiting List only)
16–23 January 2004
7–14 May 2004
A seven-day course of Master Classes, OSCE and Viva Practice, available only to trainees who have been successful in the preceding MCQ paper.
(Failure to ‘get a viva’ will guarantee a place on the following course if required).

Final FRCA (Booker) Course
6–10 October 2003 and 13–17 October 2003
19–23 April 2004 and 26–30 April 2004
Two weeks of SAQ Practice and Analysis, MCQ Practice and Analysis and Lectures/Tutorials.
Candidates may register for both weeks or for either one of the two weeks. Places are limited to 30 people.

Mersey Selective Course
29 September to 3 October 2003
16–20 February 2004
A five-day course of lectures and tutorials designed to cover some of the more esoteric aspects of the Primary Basic Sciences not adequately explained in the standard texts. Trainees are advised to consider this course two to three months ahead of the MCQ paper.

SAQ Weekend Course
17–19 October 2003
Master classes in Style and Technique. Supervised Practice and Analysis.

Primary Prep Course (MCQ)
23–28 November 2003
28 March to 2 April 2004
A six-day course of intensive MCQ Analysis intended only for candidates within weeks of sitting the Primary FRCA Examination.

Basic Obstetric Anaesthesia Course
11 November 2003
A one-day course on the Practice and Theory of Obstetrical Anaesthesia specifically designed for SHOs as an introduction to Maternity Unit responsibilities.

For further details and application forms, please see our website www.msoa.org.uk
Mechanisms, Indications and Protocol for Pulsed Radiofrequency Treatment
Friday, 28 November 2003
9.30 am to 5.00 pm
at The Governors’ Hall, St Thomas’ Hospital, London SE1

The aims of this conference are to improve the understanding of the new technique of pulsed radiofrequency for the treatment of chronic pain; to explain the technical variations of the technique practised; to share clinical experience and to reach consensus on the clinical indications for this technique.

Registration fee: £100 (incl sandwich lunch)
CEPD accreditation applied for.

Further information is available from Mary Bonner,
tel 020 7928 9292, ext 1430 email mary.bonner@gstt.sthames.nhs.uk.
Please apply by Friday, 14 November as places are restricted.

Appointment of FRCA Examiners 2004

The College invites applications from Fellows in good standing who would like to become FRCA examiners commencing on 1 September 2004. Examiners will normally be recruited to the Primary examination in the first instance, although applicants are invited to indicate an interest in the Final examination on the application form.

The precise number of vacancies is not known at the time of going to press but we envisage approximately 14.

The College welcomes applications from women and members of ethnic minorities.

Selection criteria
Applicants shall be expected to meet the following basic criteria:

- Would normally be a Fellow by Examination, but a Fellow ad eundem, or a Fellow by election will also be considered.
- On the closing date for applications shall have been a consultant anaesthetist, or have held a comparable appointment, for a minimum of seven years.
- Shall currently be active in clinical practice and in the education of trainees.
- On 1 September 2004 shall have sufficient time to complete a full examinership term before reaching normal retirement age.
- Shall have visited a recent Primary or Final FRCA examination.
- Shall have attended Equal Opportunities training

Application forms and information for applicants may be obtained from the Examinations section on the College website www.rcoa.ac.uk/examinations or from: Miss Victoria Lloyd, Training and Examinations Directorate, The Royal College of Anaesthetists, 48/49 Russell Square, London WC1B 4JY tel 020 7908 7319 email vlloyd@rcoa.ac.uk.

The closing date for receipt of completed application forms is Thursday, 31 October 2003.

PANG

Pain and Nociception Group

Goes North!

Regional anaesthesia – what’s new?
Friday, 14 November 2003
The Conference Centre, UMIST, Manchester

- Pharmacology of local anaesthetics.
- Combined regional techniques.
- The brachial plexus – common blocks.
- Useful lower limb blocks.
- Regional techniques in children.
- Obstetrics – specific requirements.
- Local anaesthesia for the eye.

Registration fee: £150 (trainees: £100)
Concessionary rates available.

Further information is available from: Mrs S Welham, PANG Administrator, 7 Dover Road, Sandwich, Kent CT13 0BL tel/fax 01304 612520 mobile 07801 930370 website www.pangmeetings.com

Approved for CEPD purposes
**Bristol Medical Simulation Centre**

**Forthcoming courses for 2003**

- 9 October – Low-Flow Anaesthesia Course, for anaesthetists (£150)
- 14 October – NCCG Critical Incidents Day, for non-consultant career grade anaesthetists (£150)
- 16–17 October – Transport for the Critically Ill Course, for all grades (£275)
- 21 October – Paediatric Anaesthesia Critical Incident Day, for occasional paediatric anaesthetists (£160)
- 22–23 October – Team Training for Critical Incidents, for nurses and clinicians (£270)
- 30–31 October – Obstetrics and Gynae Course for obstetric anaesthetists
- 3 November – Simulation Airway and Ventilation Emergency Course for SpRs and consultants in emergency medicine, ITU and anaesthesia (£150)

Fees include coffee, tea, biscuits and lunch. All courses approved for 5 CEPD points (one day) and 8 points (two days)

For further information, please contact: Mr A Jones, Centre Manager, The Bristol Medical Simulation Centre, UBHT Education Centre, Level 5, Upper Maudlin Street, Bristol BS2 8AE

tel 0117 342 0108

e-mail alan@simulationuk.com

website http://simulationuk.com

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**The Royal College of Anaesthetists**

**Annual Scottish Study Day**

Hairmyres Hospital, East Kilbride

5 December 2003

09.15–10.00 Registration and coffee
10.00–10.15 Welcome and opening remarks
10.15–10.45 An Overview of Intrathoracic Malignancy
  
  Mr Scott Queen, Specialist Registrar in Cardiothoracic Surgery, Glasgow
10.45–11.15 Preoperative Assessment for Thoracic Anaesthesia
  
  Dr Brian McCreath, Specialist Registrar in Anaesthesia, Glasgow
11.15–11.45 Thoracic Anaesthesia: How to do it
  
  Dr William McCulloch, Consultant Anaesthetist, Hairmyres Hospital
11.45–12.05 Questions
12.05–13.15 Lunch and Trade Exhibition
13.15–13.45 Alcoholic Liver Disease in ITU
  
  Dr Brian Cook, Consultant Anaesthetist, Royal Infirmary, Edinburgh
13.45–15.15 Acute Pain Services and Surgical Outcome
  
  Dr Grant Haldane, Consultant Anaesthetist, Hairmyres Hospital
14.15–14.45 No Labour Ward?
  
  Dr Tracey Dunn, Consultant Anaesthetist, Monklands DGH and Wishaw General Hospital
14.45–15.15 Tea/Coffee and Trade Exhibition
15.15–15.45 Workplace Assessments; the future
  
  Dr Jonathan Edgar, Consultant Anaesthetist, Hairmyres Hospital
15.45–16.15 NHS Quality Improvement Scotland and Anaesthesia: Where are we now?
  
  Dr Malcolm Daniel, Consultant Anaesthetist, Royal Infirmary, Glasgow
16.30 Close

**Registration fee: £40**

Further information is available from Dr M Crawford, Consultant Anaesthetist, Hairmyres Hospital, Eaglesham Road, East Kilbride, Scotland tel 01355 585724

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Courses offered in 2003 for Consultant Anaesthetists

- 10 September; 5 November – ACRM (Anaesthesia Crisis Resource Management). The integration of technical training and non-technical skills (human behaviour) to facilitate teamwork and situation awareness (£250)
- 17 September – Paediatric Critical Care Aimed at Paediatricians/Consultants at DGH, dealing with children regularly or occasionally (£250)
- 8 October – ACRM and Obstetric Anaesthesia. The principals of ACRM, as above, with an obstetric theme (£250)
- 30–31 October & 29–30 January 2004 – Instructors Course (two days). For multi-professional generic instructors concentrating on the logistics of running courses, and the art of debriefing (£400)

CEPD points approved – five CEPD points per day

Specific departmental courses can be arranged upon request. Fees include coffee, tea, and lunch.

For registration and other details please contact

The Simulation Centre, Chelsea and Westminster Hospital, 369 Fulham Road, London SW10 9NH

tel 020 8746 8632 website www.chelwestsimcentre.co.uk
Appointment of Members, Associate Members and Associate Fellows

The College would like to congratulate the following who have been admitted:

<table>
<thead>
<tr>
<th>Associate Fellows</th>
<th>Members</th>
<th>Associate Members</th>
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</thead>
<tbody>
<tr>
<td><strong>June 2003</strong></td>
<td></td>
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<tr>
<td>Dr Atul Gaur</td>
<td>Dr Ratna Mukhopadhyay</td>
<td>Dr Iftikhar Parvez</td>
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<tr>
<td>Dr Ashraf Fakhry Farid</td>
<td>Dr Hridaya Lall Shrestha</td>
<td>Dr Raza Irshad</td>
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<td></td>
<td>Dr Aleksandra Bojarska</td>
<td>Dr Madapura K Shashidhana</td>
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<tr>
<td><strong>July 2003</strong></td>
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<tr>
<td>Dr Venkatraman Hariharan</td>
<td>Dr Vijay Singh Suryavanshi</td>
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<td>Dr Smita Dilip Oswal</td>
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<td>Dr Mussarat Javed</td>
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</table>

Appointment of Fellows to consultant and similar posts

The College would like to congratulate the following Fellows on their consultant appointments:

- Dr Dominic Aldington, Frimley Park Hospital, NHS Trust, Surrey
- Dr Mogera Chandra, Royal National Orthopaedic Hospital, Stanmore
- Dr David Daniels, Guy’s and St Thomas’ Hospital NHS Trust, London
- Dr Kalpana Gupta, Northampton General Hospital
- Dr John P Harris, Colchester General Hospital, Essex
- Dr Cindy Horst, Leicester General Hospital
- Dr Joanna Lynes, University Hospital, Aintree
- Dr Latha Murali, Sandwell and West Birmingham Hospital NHS Trust

Election to Council 2004

The announcement about vacancies on Council of The Royal College of Anaesthetists, will appear in the BMJ dated Saturday, 1 November 2003. The advert will also be posted on the College website at www.rcoa.ac.uk.

Deaths

The College regretfully records the deaths of the following Fellows:

- Dr Leonard Henderson, Caithness, Scotland
- Dr Cyril (Bill) Ward, Rugby, Warwickshire

Deputy College Secretary and Training and Examinations Director
Mr David Bowman

Professional Standards Director
Mr Charlie McLaughlan

Courses and Meetings
Mr Amit Kotecha
020 7908 7347
Miss Chantelle Edward
020 7908 7325
ansaphone 020 7813 1888
fax 020 7636 8280
email educ@rcoa.ac.uk

Educational approval for Schools and hospitals
Ms Claudia Lally
020 7908 7339

Examinations Manager
Mr John McCormick
020 7908 7336

Individual Trainees
Mrs Gaynor Wybrow
020 7908 7341

IT Manager
Mr Richard Cooke

Membership Services
Miss Karen Slater
020 7908 7324

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