INSIDE THIS ISSUE:

How to CCT economically...

The Centenary of the Scottish Society of Anaesthetists (SSA)

Destination Afghanistan
ULTRASOUND GUIDED REGIONAL ANAESTHESIA – BEYOND INTRODUCTORY

These courses are organised by Regional Anaesthesia UK (RA-UK) in conjunction with SonoSite Ltd for training in ultrasound guided regional anesthetic techniques. Previous experience in regional anaesthesia is essential.

**2014 Course Dates**

<table>
<thead>
<tr>
<th>Location</th>
<th>Organisers</th>
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<tbody>
<tr>
<td>Bristol (A)</td>
<td>Dr Barry Nicholls/Dr Tony Allan</td>
</tr>
<tr>
<td>Begbroke (A)</td>
<td>Dr Suzanne Kyme</td>
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<tr>
<td>Liverpool</td>
<td>Dr Steve Roberts</td>
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<tr>
<td>Huddersfield</td>
<td>Dr Nigel Bedforth</td>
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</tbody>
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Fees: £375 (Two-day courses) includes VAT, lunch, refreshments and course materials. £260 (One-day courses) includes VAT, lunch, refreshments and course materials.

**PROGRAMME**

**Day 1**

- Ultrasound appearance of the nerves
- Machine characteristics and set-up
- Imaging and needle techniques
- Common approaches to the brachial plexus / upper / lower limb blocks
- Workshops – using phantoms / models / cadaveric procedures (A)

**Day 2**

- Consent / training and image storage
- Upper / lower limb techniques
- Abdominal / thoracic techniques
- Cervical plexus / genital / spinal / epidural / pain procedures
- Workshops – using phantoms / models / cadaveric procedures (A)

(A) = Anatomy based courses / with cadaveric procedures

For further information and to register logon to www.sonositeeducation.co.uk

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Editorial

Welcome to 2014, Centenary Year of the world’s oldest National Anaesthesia Society.

This month we send a telegram of Centenary Congratulations to the Scottish Society of Anaesthetists. Those of you who have not experienced the vibrant Scottish scene will enjoy Alastair McKenzie’s article. If you came to Congress in Edinburgh in 2011, and particularly if you were doing the Gay Gordons at the National Museum of Scotland, you will know how invigorating it might be to join in the celebrations on 20th and 21st February. Visit their website: www.scottishsocietyofanaesthetists.co.uk/SSA/Centenary_Meeting.html.

Another upcoming Centenary that does us less credit is the hundred years since the Medical Research Committee (established in 1913) commissioned investigations into the use of colloids (“gum saline”) to treat wound shock. At the time I write, hydroxyethyl starch (but not gelatin) has been banned by the Regulatory Authorities of the United Kingdom (MHRA) and Italy, while the rest of Europe and the United States’ FDA continue to allow marketing of starches for the treatment of hypovolaemia. Our friends at the College have published their Position Statement supporting the MHRA, which may have to reverse its action because the license holders have appealed successfully to the European Medicines Agency. The delayed final version of the NICE Fluid Therapy Guidelines will have been released late in November, too late for me to comment on here. Like Monty Python and the Holy Graal’s Black Knight, every slice of negative clinical evidence against colloid therapy is rebuffed by supporters claiming ‘it’s a scratch’ or ‘I’ve had worse’ or ‘it’s just a flesh wound’. The old Knight Sir Colloid has influential friends and refuses to lie down and die. But that’s just my personal view, and if you want to hear more there may still be tickets for the Winter Scientific Meeting in Westminster, January 15th to 17th: http://www.aagbi.org/education/event/1858

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Anaesthesia Meet January 2014 • Issue 317
To BIS or not to BIS... the Age Old Question?

In the UK, we have a rapidly expanding elderly population with one in five (12 million) people of pensionable age, many of whom require our services. Post-operative cognitive dysfunction (POCD) is an important cause of morbidity and loss of independence in the elderly and could have a significant impact on health service provision.

Avidan and Evers note that POCD can persist for at least 3 months after major surgery. There is evidence to suggest a link between POCD and depth of anaesthesia: Chan et al., demonstrated that Bispectral index (BIS) guided anaesthesia reduced anesthetic exposure and decreased the risk of POCD at 3 months after non-cardiac major surgery. In a recent randomised control trial by Ballard et al, patients over the age of 60 undergoing elective orthopaedic or abdominal surgery who had intra-operative monitoring of anaesthetic depth and cerebral oxygenation demonstrated reduced POCD.

So how as an anaesthetic body can we try to reduce the problem? Should we be monitoring anaesthetic depth for all our elderly patients undergoing surgery requiring a general anesthetic?

Recent NICE guidelines support the use of an EEG-based monitor in patients that are likely to experience haemodynamic instability (e.g. the elderly) or in those in whom there is concern that typical anesthetic doses could be harmful.

Interestingly, NAP5 has shown that depth of anaesthesia monitors were available in 164 centres (62%), but routinely used by only 132 (1.8%) of anaesthetists.

We should devise an official screening protocol for monitoring anaesthetic depth in the elderly, for example with BIS? We know from NCEPOD 2010 (elective and emergency surgery in the elderly) that POCD is more common in patient's aged 75 and over, in those with a history of cognitive impairment, patients having a second procedure or a long anesthetic/major surgery, and in those with pre-operative confusion and frailty. Nearly one third of patients in this NCEPOD study had evidence of post-operative delirium and confusion. With these factors we could create an ‘at risk of POCD’ assessment tool that could be done pre-operatively on the ward. It would be interesting to hear readers’ views.

Dr Samantha Black
ST5 Anaesthetics, London Deanery (SESA)

References
The Centenary of the Scottish Society of Anaesthetists (SSA)

Next month will mark the centenary of the Scottish Society of Anaesthetists, which is the oldest surviving national society of anaesthetists in the world. To celebrate the centenary of the SSA there will be a two-day meeting in Edinburgh at the National Museum of Scotland over 20-21 February 2014.

The SSA began at a dinner on 20th February 1914 held in the Balmoral Restaurant, Edinburgh. This was NOT at the site of the current Balmoral Hotel (1 Princes Street – building with clock tower shown in the photograph). The Balmoral Restaurant of 1914 was at number 2 Princes Street – now the site of Primark. Other anaesthetic societies in existence at that time were:

- American Association of Anesthetists 1912-1926: Associated Anesthetists of U.S.
- New York society of Anesthetists 1911 (originally Long Island Society of Anaesthetists f. 1905)
- London Society of Anaesthetists 1892
- London Society of Anaesthetists f. 1905
- Royal Society of Medicine 1891
- American Association of Anesthetists 1912
- Royal Society of Medicine 1891
- American Association of Anesthetists 1912

The dinner which started the SSA was attended by eleven gentlemen practising the specialty of anaesthetics in Scotland. They came from Edinburgh, Glasgow, Aberdeen and Dundee. After dinner they got down to the business for which they had come – and unanimously resolved to form a society of anaesthetists for Scotland. The first President was Dr DCA McAllum of Edinburgh. Two months later the first regular meeting was attended by the original eleven plus three more. This was reported in the quarterly Anesthesia Supplement of the American Journal of Surgery – through the enthusiasm of Dr FH McMechan, a founder member of the New York Society of Anaesthetists. The First World War effectively suspended meetings of the SSA; the members did not meet again until November 1919.

In the 1920s there were regular and productive meetings. After the British Journal of Anaesthesia was founded in 1923, it became the vehicle for SSA reports. Many of the early members were dentists, who also practised anaesthesia – they campaigned for better training in anaesthesia. In the 1930s a Presidential Badge of Office was produced. Then the Second World War again suspended SSA meetings.

Largely through the efforts of John Gillies in Edinburgh and H-H (Tony) Pinkerton in Glasgow the SSA was reborn with a meeting at Dunblane Hydro on 29th April 1950 – 72 new members were admitted, reflecting the lapse, increase in interest, introduction of the NHS and advances in anaesthesia, including muscle relaxants. By this time the name ‘John Gillies’ was well known through the Gillies anaesthetic machine, Minnitt & Gillies’ Textbook of Anaesthetics and the fact that John Gillies was President of the Association of Anaesthetists of Great Britain & Ireland.

The SSA encompassed the regional societies: Edinburgh & East of Scotland Society of Anaesthetists, and Glasgow & West of Scotland Society of Anaesthetists. Annual scientific meetings were planned, including a Registrars’ meeting with a prize for the best paper – the first was held in Glasgow on 6th October 1960.

The Society’s Newsletter began in 1960; that year a third regional society was founded: North East Scotland Society of Anaesthetists, which of course also fed into the SSA. The Golden Jubilee was celebrated in 1964. A neck-tie for members was commissioned in 1969, which led to the design of the crest, featuring a thistle, opium poppy and belladonna.

In the 1970s the society grew from strength to strength. Since 1978 the annual scientific meeting has concluded with the John Gillies Memorial Lecture. Each lecturer has been given a Caithness glass bowl bearing the crest of the SSA.

Many SSA members have made important contributions to the advancement of medicine. To mention just a few: John Gillies introduced hypnotic anaesthesia ‘physiological trespass’ to reduce excessive bleeding, Donald Campbell developed respiratory intensive care, Frank Holmes and Bruce Scott helped to elucidate the supine hypotensive syndrome of pregnancy. JD Robertson was instrumental in the establishment of a Scottish Standing Committee of the Faculty of Anaesthetists, Gordon Robson published criteria for diagnosing brain death, Alastair Spence chaired the UK report on pain after surgery which instigated acute pain teams. Gavin Kenny developed target controlled infusion of propofol. Two SSA Presidents received Knighthoods: Sir Gordon Robson (1982) and Sir Donald Campbell (1994).

The Centenary Meeting in Edinburgh will include the history of the society and of anaesthetic progress in Scotland, the state of the art in anaesthesia, critical care and pain medicine and a look at the future.

To book, visit: www.scottishsocietyofanaesthetists.co.uk

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Consultant Anaesthetist, Edinburgh

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Dr Alistair McKenzie
Consultant Anaesthetist, Edinburgh
In August 2011, MSF opened a trauma centre to cater for the victims of conflict and road traffic accidents. The hospital consisted of a four inpatient wards with a capacity of 58 beds, an emergency department, two operating theatres and a four bed intensive care unit. I was part of a team of over 20 expats and our aim was to provide healthcare to the population and train the local staff.

On arrival, the drive through traffic proved a scarier experience than any rollercoaster in Blackpool which would explain why many of our patients were victims of horrific RTAs. My first impression of the MSF house was that it was definitely not of modest decor. Painted in bright colours, the best way I could describe it was a “bling bling” house. It was just opposite the hospital and we had security guards escorting us to and from the hospital. We were mostly confined to the house and the hospital grounds. After a few briefings, I went straight to work. My duties consisted of supervising the local anaesthetic nurses during day time, dealing with the more complex cases and providing the anaesthetic out of hours service.

The “bling bling” House

The “Towards the north of Kunduz lies the Afghan-Tajikistan border, with Uzbekistan further North West and Pakistan towards the East…” droned the head of security while pointing to the map using his fly swatter. I was being given a concise history of Afghanistan, its geography, population demographics and economy by an ex-school headmaster waving his weapon of insect destruction around as he spoke passionately about his country.

After deciding to take three months out of programme to do something different, here I was at the MSF (Medecins Sans Frontieres) hospital in Kunduz.

What’s in a name?

How many John Smiths are there in the UK? How many people are called Li in China? Well, here it is easy to get befuddled by Ismatullah, Safiullah, Shafiullah, Quadriullah to list a few… sure we’ve got hospital numbers, age and procedure, but when 6 years old Safiullah comes with a fractured radius for a closed reduction, quickly followed by Shafiiullah who is 8 years old with an identical injury requiring the same intervention, things can get mixed up. It doesn’t help that the concept of a first name and a surname isn’t all that well established and patients can give two (or even more) different names. On a particularly chaotic day, the expat surgeon booked a wound debridement on the theatre list. When his turn came, it took so long to find the patient that the head nurse went on the hunt. He came back all smiles saying that we’d already done the case: it had been booked earlier by the local surgeon but under another name.

Made me laugh, made me cry, made me pull my hair in despair...

Funny logic

Two patients, two pulse oximeters, one oxygen concentrator attached to a facemask, what do you do? The recovery nurse had left two patients with the cleaner and with the instructions of keeping their SpO2 above 90%. The solution was simple: swap the oxygen and facemask alternatively as the SpO2 of each patient would go up with the oxygen then down without… I was horrified yet somewhat amused by this logic which would have been flawless had it not been for the risk of infection.

That somewhat important red stuff

Packed red cells, FFP, cryoprecipitate, platelets and all the fancy factors… forget about it. Here we’re lucky if we could have just enough of the red stuff. One longstanding patient was a young boy of 12 who had a below knee amputation following a land mine injury which had to be converted into an above knee one due to wound degernation. We wanted blood available for the procedure, however he was O negative and currently there was none available in our blood bank. Asking his relatives to donate blood was not an option as they had just done so (the usual policy being to wait three months, preferably six before donating blood again). We decided to only dress his wound, however as the old dressings were removed he started bleeding profusely. A tourniquet was applied and we made an urgent appeal to the lab and the relatives. Desperation was creeping in when his grandfather appeared and dumped a bag of blood on me. It was still warm and initially I was suspicious of its origins but it turned out that the family had bought it from a private hospital - for quite a price which MSF subsequently reimbursed. The boy survived, thanks to our excellent surgeon and his grandfather’s resourcefulness.

It’s not always a happy ending

My worst case was a 12 year old girl who fell from about 10 metres and needed an emergency laparotomy. After resuscitating her as much as possible, I anaesthetised her. However, as soon as surgery started, she had a cardiac arrest. Confusion descended as I tried asking the rest of the team to start CPR, the locals having never heard of the term before. Blank faces stared at me as I tried to mimic cardiac compressions. Finally one of the surgeons started CPR but stopped soon after on discovering that she had ruptured her liver and had lost most of her blood volume into her abdomen. It had...
I cannot end my tale without mentioning health and safety and infection control. There was enough to keep them properly busy here. When repair work on the roof was started, debris started falling through into the operating room such that I had to move my patient through into the operating room such that my colleague had to transfer and extubate his patient in the ward as theatre was being evacuated and transferred to another building. On more than one occasion we had to sterile files in theatre, once we even found kittens in the waiting area. After these were dispatched to more suitable places, we then discovered mice in the recovery room. Somebody suggested that we should let the mice eat the flies, the kittens eat the mice, the hospital dog eat the kittens and to find a donkey to deal with the dog...

Final message
I came home to Bonfire night. After two months of being constantly aware that any loud blast sound implied an influx of patients and no place to go for reprieve. The Afghans though, had nowhere to go for reprieve. However, I would be lying if I didn't say that I welcomed going home to say that this was a good experience would certainly be an understatement. I and I would definitely do it again if given the chance. However, I would be lying if I didn’t say that I welcomed going home for a bit of rest. The Afghans though, had nowhere to go for reprieve. However, I would be lying if I didn’t say that I welcomed going home.

any trainee to put their skills towards humanitarian purposes at some point in their career.

Dr Juliette Li Wan Po,
ST6 Anaesthesia, North West Deanery

For further information regarding MSF and their work: www.msf.org.uk

My third-year medical student misconceptions extended to anaesthesia in general: anaesthesitst to me was all about putting patients to sleep, waking them up and dealing with any respiratory emergencies in between. In reality, the anaesthetist comes in a multitude of guises, all fundamental to the provision of not only successful, but high quality patient care. I have worked with some innovative and dedicated anaesthetists, engineers and physicists in a centre of excellence; I hope that a description of my experience will both encourage consideration of the value of ultrasound to regional anaesthesia and demonstrate why promotion of ultrasound training at undergraduate level is a valuable adjunct to the traditional medical school curriculum.

My belief is that it is because nobody has ever really taken the time to run through the basics, the further through your training you go, the more embarrassing it seems to admit you can’t see the hyperechoic femoral nerve amongst a sea of indistinguishable hyperechoic dots. So what can be done about it?

After only one week of ultrasound training I was able to identify nerves, arteries and veins with confidence. After two weeks I could spot the muscle, name it and comment in the adjacent soft tissue structures. I hesitate to say that I was able to do this as well as my supervisor, as he'd think I'm being cheeky, but in all seriousness it seems to admit you can’t see the hyperechoic femoral nerve amongst a sea of indistinguishable hyperechoic dots. So what can be done about it?

The benefits of ultrasound guidance in regional anaesthesia (UGRA) are increasingly being described. ultrasound guidance in regional anaesthesia (UGRA) are increasingly being described. Before you write in I was just doing the scanning. Red arrow: femoral nerve, FA: femoral artery, FV: femoral vein, FL: fascia lata, FI: fascial Ilacas.

Ultrasound Guided Regional Anaesthesia: the good, the bad and the B-Mode

Prior to my two-month placement with the Institute of Academic Anaesthesia, Medical Physics and Bio-engineering at Ninewells Hospital and Medical School, I thought that ultrasound was only used for measuring foetal crown-rump length and searching for gallstones: I was so very wrong.

There was an old lady who swallowed a fly...
Royal College of Anaesthetists
London W1C 4SG

Clinical Lead ‘NAP6 – Perioperative Anaphylaxis’
National Audit Project of the Royal College of Anaesthetists

This post is a fixed term RCoA appointment to lead NAP6. NAP6 will examine perioperative anaphylaxis in NHS hospitals in England, Scotland, Wales and Northern Ireland. The successful candidate will work closely with the Royal College’s Clinical Adviser for National Audit Projects (NAPs). The project is managed on behalf of the RCoA by the Health Services Research Centre (HSRC) of the National Institute of Academic Anaesthesia (NIAA). The HSRC will provide administrative and other possible support for the project. The role will span the duration of the project (expected May 2014 to March 2017).

The post is supported by 1 period of professional activity (1 PA) per week in order to enable the successful candidate to dedicate a minimum of four hours per week to the project. Applicants should submit a one page CV and one page letter of support from their Head of Department/Line Manager to Miss Maddy Humphrey (NAP & HSRC Administrator) at m.humphrey@rcn.org.uk. This must include contact details (daytime telephone and email address).

Further information including the job description, person specification and information on former NAPs is available from the NIAA (www.niaa.org.uk) and College (www.rcn.org.uk) websites.

Who are those interested are strongly advised to discuss the role with Dr Tim Cook by email (f.cook@rcn.org.uk) or by telephone (07907 025209).

The successful candidate will start their role at a NAP6 planning meeting in spring 2014.

Closing date for applications: 17 February 2014. Interviews will be held on Wednesday 12 March 2014.
to your "base hospital" (the definition of which is variable) and your home to your current hospital on a per mile basis. E.g. if home to base is 10 miles and home to new hospital is also 10 miles you get nothing. Please note that in the past, many people claimed the tax back on this but this is absolutely not allowed and the tax man has issued specific guidance to this effect.

Car parking discounts

Some Trusts offer evening and weekend only car park permits for out of hours work. This can result in significant savings from daily parking. Many Trusts allow free parking for staff working out of hours, or local street parking maybe be free by this time – but watch out if you finish late the following morning!

Health Service Discounts

Previously known as NHS discounts, this website gives details of discounts that are available to all NHS staff. There is a wide selection of products and services on offer, everything from gym membership to mobile phone contracts and breakdown cover. www.healthservicediscounts.com

Registration with the website is free and offers discounts grouped in different categories. Each retailer offers a different discount package with their own terms and conditions. The offers vary over time and some are only on for limited periods so it is worth checking regularly or following on Facebook. Many offers are in the form of vouchers and once purchased, they can be used either online or in shops.

Cycle to Work scheme

Your Trust may be part of a Cycle to Work scheme. This is a Government initiative that allows you to purchase a bicycle (and associated accessories such as a helmet and lock) tax free. Your Trust intranet or staff pages will detail exactly how the scheme operates as it varies depending on which provider they have signed up to. Your bicycle can be chosen from dedicated online retailers, up to a maximum of £1000. An order is then submitted and you enter into a hire agreement with the Trust. The cost of the bike will be deducted from your salary in instalments over, for example, 12 months. At the end of this period, the bicycle is effectively yours, although you may have to pay a nominal ‘disposal fee’ or ‘market value payment’. Details can be found at: www.cycletoworkalliance.org.uk

Courses and conferences

Sometimes you can volunteer as a helper and attend the course for a reduced rate of subscription or membership fee for this period.

Salary sacrifice schemes are available to parents paying for childcare (e.g. in nursery, OFSTED registered childminders and nannies). The schemes allow parents to pay for childcare out of their pre-tax salary. Details can be found on the NHS Employer website: http://www.rhesemployer.org/planning-your-workforce/flexible-workforce/employmentscheme/childcarebenefit/pages/childcareproviders.aspx. To work out if you are likely to benefit from this, the HMRC has an online calculator to help you decide if this is the right choice for you: www.hmrc.gov.uk/calcs/ccc

Note that salary sacrifice schemes (including the Cycle to Work scheme) may affect any subsequent maternity pay and pension entitlement. This may affect your decision to take part – for further details, please refer to: www.hmrc.gov.uk/employers/sml-salary-sacrifice.pdf

Obviously not all of the ideas listed here will be applicable to everyone, and it is important to place a value on your own time spent researching options and filling in forms! However, there are significant savings to be had for many people with relatively little effort – we hope this article has given you some inspiration on how to make sure your hard earned pennies are put to the most efficient use.

Disclaimer: This article aims to provide ideas for making economic savings during the training rotation. Its contents should not be taken as professional tax advice, and its authors and AAGBI will not be responsible for liabilities resulting from such interpretations.

Renée Ford
ST5 Wessex Deanery

Sophie Morris
Consultant, Brighton and Sussex University Hospital’s NHS Trust

Opening Times

Mon, Tues, Thurs & Friday from 10.00am – 4.00pm
21 PORTLAND PLACE | LONDON | W1B 1PY
www.aagbi.org/education/heritage-centre

The exhibition honours the work of doctors, especially anaesthetists, in treating injuries caused by wars and terrorist attacks and explores the development of pain relief, paying tribute to those who have been affected by wars and disasters.

Did you know?
• Before 1950, seriously injured people received little or no life-saving treatment before they arrived at hospital
• At the Moorgate tube disaster in 1975, 16 out of 18 doctors on site were anaesthetists
• The earliest recorded use of anaesthesia during wartime is March/April 1947 during the Mexican-American War – less than one year after the first public demonstration

Visit the exhibition and learn more...

Also featured: An interview with Dr Andrew Hartle who treated the victims of the 2007 London Tube bombings and shares his recollections of the aftermath.

“This has been closure and it’s shown that London is not just about the bombings, London is about something fantastic.”

Dr. Andrew Hartle

GAT logo

Group of Anaesthetists in Training

AAGBI Foundation: Registered as a charity in England & Wales no. 293575 and in Scotland no. SC040697

Anaesthesia News January 2014 • Issue 318
Recognising the Role of PPI in Anaesthesia Research

(And no... I’m not talking about payment protection or reflux!)

Following a welcome address by Dr Aresh Anwar, Medical Director for the Trust, Professor Fang Qiao, Professor and Consultant in Anaesthesia and Critical Care and Academic Department Lead, described what a clinical trial is, why patient involvement is required in research and how patients can be involved in the research cycle (fig 1). An example of the different agendas was provided by orthopaedic surgery where patient opinion as to where research funding should be directed is not reflected in the clinical research actually done.

Contributions from current research fellows, and the academic department research portfolio managers, which portrayed how public involvement was being garnered and promoted within the trials carried out within the department presently, and how much more was still needed. One telling contribution to the evening was from Ms Rosemary Kyle, who recounted her experiences as both a researcher in public health and her experiences as a patient. She emphasised how her thought process as a researcher changed as she took on the patient role, and the many fears and anxieties that accompanied it. This clearly struck a chord with our patient audience and stimulated much discussion. One gentleman mentioned his experiences as a patient and how he felt that these could lead to clinical research questions that required answering; however a mechanism was required for patients to channel their feedback from their NHS experience so that it could be grasped by clinical researchers. Another lady stated that while seemingly strong-minded patients were often involved in patient and public conferences, “sometimes it is the shy patient with concerns and an opinion that just needs that bit of support and guidance [as to where] to voice their opinion”. This quote expressly demonstrates how the use of patient and public involvement should seek to empower the patient so that they can feel more integrated with the research that will ultimately affect their care.

The evening culminated with a discussion on how patients and relatives could get involved with the research process and the Clinical Research Ambassador Group. The success of which clearly manifested with a show of hands across the seminar room from patients indicating their support and willingness to contribute to future meetings and PPI events held by CRAG and HEFT. Our patients have always had a voice and opinion regarding the development of their treatment and care – all that was lacking was an avenue through which it could be heard.

Patient and public involvement is being progressively acknowledged as a crucial component of the clinical trial process, as shown by the increasing emphasis on patient and public involvement within research funding application forms. Patients like Rosemary are being ever increasingly requested for their opinion on grant proposals prior to submission to ensure adequate emphasis on patient opinion and safety, while simultaneously funding organisations and charities are employing lay panel members when assessing the feasibility and design of a trial, including patient considerations and safety. In a specialty such as Anaesthetics where there is so much variation in clinical practice and many questions to which we have no answer, maybe it is time to ask the patient what matters most in their care rather than debating it whilst they are intubated and asleep.

I had the pleasure of attending the first meeting of the Clinical Research Ambassador Group (CRAG) in April 2013, hosted by the Heart of England NHS Foundation Trust (HEFT). As well as the Academic Department of Anaesthesia, Critical Care, Pain and Resuscitation, there was a large turnout of patients, relatives, clinicians, researchers and even managers and directors. The evening began with refreshments and a light buffet.

"Please describe how you will involve patients and the public in your study, including the sharing of data and appropriate milestones.”

Earlier this year the above words stared at me from a computer screen, as I was about to submit a grant application for my proposed study. I had put together what I believed was a decent piece of prose explaining the background and significance of the research, the methodology and how I was going to use my statistical knowledge to decrypt the results and produce an answer. But how was I to show this to our patient audience? I was stumped. To me, PPI meant proton pump inhibitor, not patient and public involvement in research studies. Which is why, months later, I am sitting in front of another computer screen writing about my research grant proposal struggles.

Patient and public involvement in the design and running of research trials is becoming increasingly important. The National Institute of Health Research (NIHR), set up and funded a national advisory group named INVOLVE in 1996 to involve the public in NHS, social care and public health research.1 Anaesthetists have opinions as to important research questions but we will only know which are of most concern to patients if they are involved in the design process. Patient involvement should begin at the grassroots level with individual research departments and NHS trusts. This way, not only will we as clinicians be generating more meaningful research for the patients we are aiming to treat, but also precious research funds obtained from charities and the taxpayer (the patients) will be utilised far more effectively.

References

Dr Mudassar Ali Aslam,
NIHR Academic Clinical Fellow, ST2 Anaesthesia, Academic Department of Anaesthesia, Critical Care, Pain and Resuscitation, Heart of England NHS Foundation Trust


Regional Anaesthesia: What can the UK learn from Scandinavia?

As part of my recent fellowship in regional anaesthesia I spent a week visiting two Scandinavian teaching hospitals, the Rikshospitalet in Oslo, Norway and the paediatric centre at Karolinska in Stockholm, Sweden. As well as observing some interesting regional techniques, this opportunity enabled me to compare Scandinavian healthcare with the NHS, focusing on regional anaesthesia, paediatric anaesthesia, and the role of nurse anaesthetists and theatre efficiency.

Over the last three decades regional anaesthesia has evolved, thanks largely to peripheral nerve stimulation and more recently ultrasound guidance (USG). USG significantly reduces time and number of attempts to perform blocks, and improves the quality of block. This has enabled anaesthetists to provide a service in which a wide variety of operations are now possible under regional blockade, either alone, with sedation, or as a complement to general anaesthesia. Although the potential advantages that this confers are well documented, in the United Kingdom regional anaesthesia is often not used, even when indicated, for a variety of reasons. These may include concerns about time and reliability, lack of experience or familiarity and patient anxiety. Given the established reputation of our Scandinavian colleagues, I was keen to see how a regional anaesthesia service could be delivered in a system in which it is considered standard practice, rather than something which results in sighing, raised eyebrows and clock-watching. I observed three techniques which have evolved to take advantage of the US beam. The recognisable “Shamrock” pattern, made up of posos anteriorly, erector spine posteriorly and quadratus lumborum at the apex of the transverse process of L4 is visualised, in addition to the nerve roots of the lumbar plexus. Whilst USG cannot eliminate the risk of epidural or intrathecal injection, the real-time observation of LA spread may confer a degree of safety. I saw this block being performed in both children and adults with great success, for a variety of femoral and knee procedures at Rikshospitalet, where Sauter et al have used it in well over 200 patients without complication.

Caudal Epidural Anaesthesia

Caudal epidural anaesthesia is a well established and relatively safe technique, especially in children. USG may be used to aid the identification of landmarks including the sacral cornua, using both transverse and longitudinal probe orientations in children and adults. When placed as a longitudinal block it is often induced in theatre whilst blocks are inserted in an anaesthetic room. Making efficient use of the supervising anaesthetist’s time who then hands over patients to the care of a NA for maintenance of anaesthesia. A child as well as improving theatre efficiency and reducing downtime, this confers an economical advantage in the same way that dedicated ‘block rooms’ do. 19 Although they are supervised, in many cases Scandinavian NAs operate with a fair degree of independence and are competent to carry out a broad range of procedures and interventions. Their equivalents in the UK – Physicians’ Assistants (Anaesth). formerly known as Anaesthesia Practitioners – have followed this lead, gradually carving a niche over the last decade, becoming more involved in service delivery in Scandinavia, where one anaesthetist, one anaesthetic room and one theatre constitutes the UK model of one anaesthetist, one anaesthetic room and one theatre. As well as improving theatre efficiency and reducing failure rates when compared to anaesthetic trainees and consultants. 5

Lumbar Plexus Block

Although LPB is well established and effective, concerns remain about the potential for serious complications. USG approaches have previously been described,2,3 but Sauter et al at Rikshospitalet have recently outlined an alternative in-plane approach,7 in which the needle is inserted prior to advancement of the US probe placed over the patient’s flanks. This is more akin to the traditional landmark methods and also affords better needle visualisation as its direction is perpendicular to the transverse plane. This replaces the ‘blind dart’ pattern, made up of USG and ultrasound guided lumbar plexus block (USG LPB). 5

Nurse Anaesthetists

As in many parts of the world, nurse anaesthetists (NA) have long played a central role in service delivery in Scandinavia, where one anaesthetist room frequently services multiple theatres. Anaesthetists are often involved in theatre whilst blocks are inserted in an anaesthetic room, making efficient use of the supervising anaesthetist’s time who then hands over patients to the care of a NA for maintenance of anaesthesia. A child as well as improving theatre efficiency and reducing downtime, this confers an economical advantage in the same way that dedicated ‘block rooms’ do. Although they are supervised, in many cases Scandinavian NAs operate with a fair degree of independence and are competent to carry out a broad range of procedures and interventions. Their equivalents in the UK – Physicians’ Assistants (Anaesth). formerly known as Anaesthesia Practitioners – have followed this lead, gradually carving a niche over the last decade, becoming more involved in service delivery in Scandinavia, where one anaesthetist, one anaesthetic room and one theatre constitutes the UK model of one anaesthetist, one anaesthetic room and one theatre.

References

16. Armstrong KP, Cherry RA. Brachial plexus anesthesia compared to general anesthesia for a variety of indications at Rhikshospitalet, but particularly for caesarean sections. This was a very impressive technique, providing prolonged analgesia for up to 24 hours whilst avoiding the side effects of intrathecal opiates. Deburring and scanning the blocks and the USG of the lumbar plexus is an intrinsically efficient infrastructure in Scandinavia, which, in combination with USG regional anaesthesia delivers an impressive flow of patients through theatre. Patient outcome indices are often better with regional techniques, and USG improves their delivery in a number of ways. Although the traditional UK model of one anaesthetist, one anaesthetic room and one theatre is established, ‘block rooms’ and PAs have the potential to improve efficiency and reduce costs,16 without compromising safety. Given the changing shape of the UK workforce and likely increase in future surgical throughput,18 PAs and USG regional anaesthesia are ideally placed to play an increasingly important role throughout the NHS.

J. A. Simpson

Speciality Registrar in Anaesthesia (ST7), South-West Peninsula Deanery. Currently employed at South Devon Healthcare NHS Foundation Trust, Torbay Hospital, Torquay, UK.
Anaesthetists are peri-operative physicians and need to be directly involved in pre-operative patient assessment and decision-making processes. The truth of this statement was frequently brought home to me during my fellowship year at The Alfred Hospital in Melbourne, Australia, where my attendance at Pre-Anaesthetic Assessment Clinics (PAC) was scheduled as a matter of routine. This 600-bed tertiary referral hospital provides all major surgical specialties with the exception of paediatrics and obstetrics/gynaecology.

As a registrar in southwest London, I was occasionally asked by a nurse to assist in the screening of a patient in a pre-anaesthetic clinic. However the infrequency of such occasions meant that prior to my arrival at The Alfred, I had gained very little insight into this important facet of anaesthetic practice. My UK training programme did not allocate time to pre-anaesthetic assessment and clinics had been predominantly nurse led. At The Alfred the approach was very different, and all senior trainees were allocated a weekly pre-assessment clinic. A consultant was always present to guide decision-making. I found discussions with senior anaesthetists to be invaluable learning opportunities that helped to build confidence in making decisions on patient care pathways.

Guided PAC training provides more cost effective healthcare, ensuring that essential investigations are done, over-investigation is avoided, efficiency is maximised and distressing and disruptive day of surgery cancellations are minimised. Based upon my Australian experience, I would assert that an anaesthetist-led peri-operative care model is essential in improving patient journeys and patient-centred care. The Alfred had 17 peri-operative nurse coordinators, one dedicated to each of the surgical units. They screened each referral and identified those needing further medical review. This process was facilitated by a detailed health questionnaire, but there were no rules dictating who should be referred to the PAC, giving scope for these experienced coordinators to exercise their discretion. In general patients booked for complex procedures, those over 60 with co-morbidities and obesity were scheduled for review by an anaesthetist. The hospital had approximately 150 intranet guidelines for common surgical procedures. Essential or desirable pre-operative investigations were identified, requested by the coordinators and completed prior to the patient’s PAC appointment, increasing efficiency.

The PAC reviewed up to 100 patients per week (approximately 50% of all patients treated at the Alfred) with multidisciplinary input from Anaesthetics, Pharmacy and Allied Health (Physiotherapy and Occupational Therapy), the clinic nurse, the surgeon, and the peri-operative coordinator. As well as assessing if the patient was medically fit for surgery, the operation was scheduled appropriately and all other requirements were addressed prior to admission. The face-to-face meeting allowed the anaesthetist time to discuss the anaesthetic and answer the patient’s questions and concerns in a non-stressful environment and to identify and obtain consent from patients for peri-operative medical research projects.

There was an efficient computer-based system. Patients were either “signed off” as ready for surgery, or marked as “pending” until further information or investigations, had been organised by the peri-operative coordinators and the results reviewed by anaesthetists in the clinic. The PAC assessment, special investigation results, radiology reports with images and laboratory results of any patient was available to view online, all in the same programme during the week preceding surgery. This facilitated easy access to the relevant information for the multidisciplinary team, and there were very few cancellations.

The scope and scale of High Risk Anaesthetic Clinics is changing. The importance of pre-assessment has been recognised especially with regard to the Enhanced Recovery Programmes. I feel that in the UK we need to outsource some of the burden of pre-operative investigations to primary care and have results available electronically at pre-assessment. I also feel strongly that senior anaesthetic trainees should be allocated to these clinics as an essential part of their training. I am not for a moment undermining the importance of nurses in the pre-operative setting, but am emphasising the importance for anaesthetists to be directly involved in patient consultations. Failure to engage will be to the detriment of our specialty and will lead to us rapidly becoming theatre technicians, rather than clinicians with an interest in the care of our patients through the perioperative period.
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Dear Editor,

WHO WOULD HAVE GUESSED? - Some obtuse causes of transfer hypotension to share and beware!

What would you do if a patient in your care developed an unexpected precipitous drop in blood pressure during transfer?

“You’d probably check your patient, then you’d check your equipment, and you’d take steps to rectify the problem’…….

EPISODE 1:

The lift door started to close too soon. After the bed and lift door shared a gentle glancing blow there was sudden drop in the patient’s previously stabilised blood pressure.

It transpired that the tubing connecting the adrenaline pump syringe to patient had been compromised during the bump. The tubing was completely sheared off at the connector hub and the adrenaline infusion was leaking out, causing the hypotensive trend. The problem was easily identified then temporarily rectified with boluses of adrenaline whilst the spare infusion pump was connected to the patient and safe onward passage made to CT suite.

EPISODE 2:

An unexpected hypotensive event occurred during patient transfer onto the CT table. Blood pressure was easily maintained with iv boluses of adrenaline, but the aetiology of hypotension remained obscure. The adrenaline infusion pump was completely intact visually and there was no leak from the system. When another pump and tubing were fitted, however, the problem completely disappeared.

On this occasion the connecting tubing had been nipped by the bed sides as the bed was lowered and levelled electrically, but there was no visual evidence of any problem. Later experiment showed it to be impossible to force fluid or air through the tubing and it was discovered that there was complete internal obstruction near the hub without immediately discernible external clues.

Whilst the adage ‘prevention is better than cure’ may be applied, the authors’ hope in sharing this information is that some unknown colleagues may find that 'fore-warned is fore-armed'.

Dr Juan Graterol,
Locum Consultant, Cheltenham General Hospital

Dr Raymond Foster,
Core Trainee, Cheltenham General Hospital

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Dear Editor,

I thought ‘The Swiss Cheese Model of Spinal Anaesthesia’ was an inspired and memorable attempt to convey the fail of performing spinal anaesthesia. However, my major concern was the vertebroal level it demonstrated. A basic tenant of safe spinal insertion is to identify a vertebroal space lower than the termination of the spinal cord, so as to avoid inadvertent damage to the cord. May I suggest the substitution of the celery, representing the spinal cord, with some ‘Cheestrings’ (manufactured by Kerry Foods) to represent a cauda equina?

References
The Swiss Cheese Model of Spinal Anaesthesia
St Lysons, S. Kost Anaesthesia News Issue 316 November 2013 p 5

Declaration of interest:
Dr Price has resisted buying Chaoestrings, despite pleas from her daughter.

Dr Yvonne Price
ST4 anaesthesia, Barts and The London School of Anaesthesia

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Dear Editor,

We have enjoyed looking at the recent published photographs from the Great Anaesthesia Bake. Our department is full of keen bakers with a competitive spirit and this year, we held our 3rd annual bake-off. We had over 25 entries in categories of sweet, savoury, and novelty bakes. Unfortunately, we held our bake-off in March, a month before the Great Anaesthesia Bake was launched at GAT 2013. Nevertheless, everyone had a great time and we raised over £400 in aid of Comic Relief.

One of our best entries was this edible Aestiva anaesthetic machine, made by the talented wife of one of our consultants and complete with circuit and reservoir bag. We have found such events to be a great morale booster for the entire department and everyone from anaesthetists, surgeons, nurses, physiotherapists and more get involved. Hopefully our 4th annual bake-off next year will be able to raise money for Lifeline.

Yvonne Louise Bramma
ST3 Anaesthetics, Royal Alexandra Hospital, Paisley

Dear Editor,

Bigging up our bakeoff.

‘The humble cake has become a hero of our times’ Ruth Tilmey.

Inspired by the AAGBI’s Great anaesthesia bake campaign in support of the excellent international work of Lifeline we set about organising our Great perioperative bake. Having recently moved our large teaching hospital into a new building our department is now spread over three floors. How could we harness the baking skills and cake buying power of the staff of our 23 theatres and 50 bedded critical care units to maximise our fund raising potential and the spread of the feel good factor? We asked members of staff to strike a pose with their cake of choice and collated the photos to create an eye-catching poster that was posted in all the key areas.

People stopped to check, is that really the clinical director with a muffin for a head? What were the theatre manager and the scrub sister doing with the cherry bakewells? What was this all about? What was this all about? The poster continued to generate smiles on a daily basis the two weeks running up to our event. On the day we had a phenomenal response and were proud that our department managed to raise over £700 for Lifeline. We believe that our poster maximised our fundraising. We also believe that by ‘bigging up our bake off’ with a light hearted advertising campaign we maximised the positive effect on the morale of our department that extended for a period of time beyond the day of our event.

Dr Laura Fulton
SpR, Barts and the London School of Anaesthesia

Dr Rosse Tallach
Consultant Anaesthetist, The Royal London Hospital

Dr Richard Griffiths,
AAGBI Honorary Secretary
Accidental spinal potassium chloride injection successfully treated with spinal lavage.

Since the National Patient Safety Agency alert in 2011 regarding spinal (intrathecal), epidural and regional devices, there has been a lot of activity by manufacturers and anaesthetists to come up with a non-Luer-lock system that works well enough to be used for spinal and epidural injections. This case report is another example of a patient who was given the wrong drug into their intrathecal space. The patient received an accidental injection of 2ml of potassium chloride 7.45% during spinal anaesthesia before elective total hip replacement. A patient received an accidental injection of 2ml of potassium chloride (Pulmicort) or saline before induction of anaesthesia. The overall benefit of budesonide treatment, compared to saline, was limited to reduced peak and plateau airway pressures during mechanical ventilation, without any significant effect on gas exchange or oxygenation. Pro-inflammatory cytokine concentrations were also reduced in the budesonide group. Overall, this treatment shows promise, for thoracic anaesthetists at least, and further clinical studies are required in thoracic and other anaesthetic specialties associated with high airway pressures during mechanical ventilation and potential lung injury, for example during laparoscopic or robotic surgery in the steep Trendelenburg position. Studies in ICU patients would also be of interest, although by the time treatment could be started the acute lung injury will almost certainly already have occurred, so the effectiveness of inhaled steroid may be questionable in such cases. Asthmatic patients already use inhaled steroids (albeit chronically) to reduce bronchospasm – maybe they may have a role in anaesthesia and ICU.


Meta-analysis of the success of block following combined spinal-epidural vs epidural analgesia during labour.

The debate about combined spinal versus epidural alone has been raging for at least 10 to 15 years, and (as usual), anaesthetists seem to be in one camp or another. These authors have examined all the evidence for at least 10 to 15 years, and (as usual), they then performed a very thorough meta-analysis. They included 10 randomised controlled trials, with a total of 1722 parturients. The only statistically significant result was a reduced rate of unilateral block in the combined spinal-epidural (CSE) group, compared to epidural alone, although there was heterogeneity between the studies included in the meta-analysis. So, despite this large number of patients in a reasonable number of randomised controlled trials, we are no nearer a final decision. A Cochrane review compared CSE with epidural and found more favourable outcomes with regard to the need for rescue analgesia and urinary retention in CSE treated parturients. On the other hand, CSE resulted in more pruritus than epidural. Again, you could argue we have equipoise. So what we need is a properly powered large randomised controlled trial – as of now, there are none on http://clinicaltrials.gov that I could see (accessed 13/11/2013). In the meantime, no doubt the debate will carry on.


Therapeutic effect of inhaled budesonide (Pulmicort® Turbuhaler) on the inflammatory response to one-lung ventilation.

There is still controversy regarding the role of systemic steroid treatment in patients with acute lung injury, and clinical practice is also divided, with some believing in it and others not. There is much less in the literature regarding the benefit of localised steroids on preventing acute lung injury, which is an inflammatory condition so therefore there is some logic to such studies. Preliminary trials in animals have been positive, however this trial is the first to look at inhaled steroids before one-lung anaesthesia, which is known in itself to lead to lung injury and local inflammation. In this double-blind, randomised controlled trial from a group of Chinese authors, 100 patients undergoing thoracic surgery were randomised to receive nebulized budesonide (Pulmicort steroid) or saline before induction of anaesthesia. The overall benefit of budesonide treatment, compared to saline, was limited to reduced peak and plateau airway pressures during mechanical ventilation, without any noticeable effect on gas exchange or oxygenation. Pro-inflammatory cytokine concentrations were also reduced in the budesonide group. Overall, this treatment shows promise, for thoracic anaesthetists at least, and further clinical studies are required in thoracic and other anaesthetic specialties associated with high airway pressures during mechanical ventilation and potential lung injury, for example during laparoscopic or robotic surgery in the steep Trendelenburg position. Studies in ICU patients would also be of interest, although by the time treatment could be started the acute lung injury will almost certainly already have occurred, so the effectiveness of inhaled steroid may be questionable in such cases. Asthmatic patients already use inhaled steroids (albeit chronically) to reduce bronchospasm – maybe they may have a role in anaesthesia and ICU.


A. A Klein, Editor, Anaesthesia

NB. the articles referred to can be found either in a print issue or on Early View (ePub ahead of print)
**Introduction**

At a concentration of 0.9% Sodium Chloride in causing hyperchloraemic metabolic acidosis has been well established. Prior to this study, there has been no evident link between this physiological derangement and adverse postoperative outcomes. The authors aimed to establish whether acute postoperative hyperchloraemia (serum chlorine of >110 mmol/L on days 1-5) was associated with increased 30-day mortality or other significant morbidity.

**Methods**

Data was retrospectively collected on 22,851 consecutive adult patients undergoing non-cardiac surgery in three major hospitals in Toronto, Canada, between January 2003 and December 2008. Patients identified as being hyperchloraemic post-operatively were then propensity matched with non-hyperchloraemic controls.

Primary outcome was defined as in-hospital death within 30 days of surgery. Secondary outcomes included length of hospital stay, occurrence of postoperative pulmonary oedema, myocardial ischaemia, cerebrovascular events, cardiac arrest, atrial fibrillation, and postoperative renal failure.

**Results**

Acute postoperative hyperchloraemia was identified in 22% of patients (4955/22,851). Of these, 4266 were propensity matched to controls. Both groups were well balanced in terms of gender, age, type of surgery, pre-existing comorbidities, and transfusion requirements, how urgent the surgery was, and length of operation.

The hyperchloraemic group had a significant increase in 30-day mortality (3.9% vs 1.9%, odds ratio 1.58, CI 1.25-1.98), and an increase in hospital stay (7.0 days vs 6.3 days).

**Discussion**

In this retrospective cohort, the authors have successfully demonstrated adverse outcomes with acute postoperative hyperchloraemia, in a large dataset of adult surgical patients. This goes some way to reinforce the ideas that management of fluid therapy should be taken very seriously.

The major limitation in the trial lies with the absence of data on operative hyperchloraemia is due solely to Normal Saline administration, as it is the cheapest, and thus most used, crystalloid at their institutions.

However, the most important finding is that hyperchloraemic controls.

In 2013, Wald et al, concluded that preventive PCI reduced the risk of future adverse cardiovascular events and mortality.

**References**


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