# Anaesthesia News

#### August 2022

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James Lind Alliance and Greener Operations search for sustainable peri-operative practice

Anaesthesia the Norwegian way

Working with the media during the pandemic

Difficult Airway Society UK airway database - the experience so far



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# Welcome



Our first article is an obituary for Dr John Nunn, a transcending polymath who fortunately for our specialty decided that he would earn a living from anaesthesia. My only personal memory is being told that, when he was asked to give a lecture at a meeting on a topic of his choice, replied that would the organisers prefer ancient Egyptian medicine or astrophysics? The James Lind Alliance 'Greener Operations' exercise to determine top priorities for research into environmentallyimportant research priorities in peri-operative practice has reported; we feature a summary of the process plus the top 10. We then have a provoking article about the role of nurse anaesthetists in Norway. Sometimes "how we've always done it" ceases to be possible, and looking outside our borders can help guide the way forward.

Besides looking outwards, looking backwards is also required at times. Getting the message of what we as anaesthetists do out to the public, in an accurate form, is essential. Northwick Park Hospital was at the centre of an early peak of COVID-19, and liaising with the media became a crucial part of that process. The prize winning essay for the Wylie prize examines the impact of the COVID pandemic on groups who were already at risk of worse health outcomes than the most privileged in society.

We publish a call for anaesthetic departments to participate in submitting cases to the DAS airway database, a project supported by the Association of Anaesthetists as well as many other relevant organisations.

The final article, alas a Lack: an erudite piece about the elephant (tubing) in the (operating) room.

In conclusion, two huge congratulations are in order: to Dr Peter Young, Association Board Member and Chair of the Safety Committee, for the award of an MBE for pioneering contributions to improving patient safety - my personal thanks go to him for the *Anaesthesia News* safety- and innovationthemed issues that he had edited (Issues 403, 414, 418); and also to our sister publication *Anaesthesia* journal, new Impact Factor 12.893, *'#1 in Anesthesiology'* category - amazing work from all that team!

#### Mike Kinsella

Editor, Anaesthesia News

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#### Errata - July Issue 420:

Page 16, Question 2 should read: On 16 October 1846.... Question 6 should read: Concerning Joseph Clover,..... Page 19, 1942 should read: C. J. Massey Dawkins performs the first epidural in the UK

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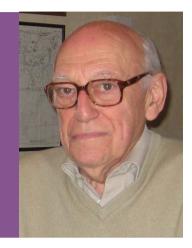
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# **Obituary: Dr John Francis Nunn**

MB ChB, DSc, MD, PhD, FGS, FRCS (Hon), FRCA (Hon), FANZCA (Hon), FCAI (Hon) **1925-2022** 

John Nunn was born in Colwyn Bay in 1925, the son of Francis Nunn and his second wife Lilian Davies. He was educated at Wrekin School and then read medicine at Birmingham University. He was by then passionate about climbing and geology. John and three geologists left Birmingham the day after graduating in July 1948 to undertake the first post-war geological expedition to Spitzbergen. An early return home because of the early onset of winter enabled him to undertake the last four months of his medical house job.



The Colonial Medical Service took John to Penang in 1949. He went there as a surgical assistant, but had to confess that he had yet to perform even an appendicectomy. On his third day at work, faced with a patient with a significant jaw tumour, he suggested a blind nasal intubation, having learned the technique from a colleague in Birmingham. John credited that single case as the reason he became an anaesthetist. He returned to Birmingham in April 1953 and a month later passed the DA.

From what had become a Senior Registrar post, he moved in 1957 to the new Research Department of Anaesthetics at the Royal College of Surgeons. There he undertook groundbreaking investigations on blood gas changes during general anaesthesia. This author was witness to the liberal bloodshed resulting from these experiments. In 1959 his thesis *Factors influencing the arterial carbon dioxide tension during anaesthesia* earned the degree of PhD. In 1964 he was invited to become the Foundation Professor of Anaesthesia at the University of Leeds. This department became a mecca for visiting researchers. John used to delight, during those Cold War days, in having papers published jointly by Russian and American colleagues.

After nearly four years in Leeds, John was offered the post of Head of Department of Anaesthesia at the new Clinical Research Centre that was to be an integral part of Northwick Park Hospital, and started in August 1968. In 1970 John submitted the text of *Applied respiratory physiology – with special reference to anaesthesia* [1] for the degree of MD. In 1979 he was elected Dean of the Faculty of Anaesthetists at the Royal College of Surgeons, and five years later he was elected President of the Section of Anaesthetics at the Royal Society of Medicine. John was the first recipient of the Association of Anaesthetists Ivan Magill Medal in 1988 and served as vice-president from 1988 to 1989. In 1991 he retired and was able to return to his lifelong passion for geology. His publication of a stratigraphic survey of Durlston Bay led to the first granting of the Richardson Award for the best science-based paper of the year in the journal of the Association of Geologists to an amateur geologist. In 1992 he submitted his published articles since 1969 for the degree of DSc. This was followed by Fellowship of the Geological Society.

In 1996 he authored Ancient Egyptian medicine [2], unique in that the author was both a medical practitioner and proficient in hieroglyphs. This was followed by the hieroglyph version of *The Tale of Peter Rabbit* [3], now in its 8<sup>th</sup> reprint. John continued to publish until 2006 in the field of climate change, in particular in relation to the population effect of rising sea levels.

John Nunn was a true polymath, a compulsive educator and an inspiration to all who worked with him. Sheila, his beloved wife of over 69 years, pre-deceased him. He is survived by his three children, seven grandchildren, two of whom are doctors, and 5 great-grandchildren. Having suffered from vascular dementia for several years, John was taken ill suddenly and died of respiratory failure on 9 May 2022.

#### **Geoffrey Nunn**

Bedale, Yorkshire

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# James Lind Alliance and Greener Operations search for sustainable peri-operative practice

The James Lind Alliance (JLA) is an organisation that aims to improve the direction of research, through a formal and open process. Much investigation is currently performed based on researchers' perception of what they believe to be important outcomes, as well as the established research infrastructure in an institution or department. The JLA, funded by the NIHR, starts with the premise that patients and carers are also central to determining any such priorities, and aims to establish these priorities through a structured sequence of stakeholder and public consultation, discussion and refinement led by a Priority Setting Partnership (PSP) Steering Group.

Such a group was set up to investigate sustainable perioperative practice at the end of 2020, using the short title 'Greener Operations'. The project was funded by the Manchester Foundation Trust Charity and co-lead by consultant anaesthetist Cliff Shelton and retired consultant general surgeon and medical examiner David Jones, both of Wythenshawe Hospital, with senior anaesthetic trainees Max Clayton-Smith and Hrishi Narayanan acting as information specialists for the project. The core team were supported by a multidisciplinary steering group that also included patient and public representation, and an advisor from the JLA, Jonathan Gower. Greener Operations was supported by 25 partner organisations, including the Association of Anaesthetists, who provided an invaluable link to clinicians, patients and members of the public.

An initial call for potential research questions (areas of uncertainty) returned nearly 2000 suggestions, of which just over 1600 were considered to be within the scope of the investigation. These suggestions were collated and refined to produce a long-list of 60 answerable questions, and stakeholders were surveyed a second time to reduce these to a manageable shortlist of 24. Finally, a series of round-table discussions, hosted at the Association of Anaesthetists headquarters on 15 June, produced a ranked 'top 10' research priorities [1]. It is hoped that these will focus the efforts of researchers and funders to conduct research in the field of sustainable peri-operative care that meets the needs of the ultimate 'end users' of research: clinicians, members of the public, carers and patients.

#### Mike Kinsella

Association of Anaesthetists Council Member and Member of the Greener Operations PSP Steering Group

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#### Greener Operations: Sustainable Peri-Operative Practice Top 10

- 1. How can more sustainable reusable equipment safely be used during and around the time of an operation?
- 2. How can healthcare organisations more sustainably procure (obtain) medicines, equipment and items used during and around the time of an operation?
- 3. How can healthcare professionals who deliver care during and around the time of an operation be encouraged to adopt sustainable actions in practice?
- 4. Can more efficient use of operating theatres and associated practices reduce the environmental impact of operations?
- 5. How can the amount of waste generated during and around the time of an operation be minimised?
- 6. How do we measure and compare the short- and longterm environmental impacts of surgical and non-surgical treatments for the same condition?
- 7. What is the environmental impact of different anaesthetic techniques (e.g., different types of general, regional and local anaesthesia) used for the same operation?
- 8. How should the environmental impact of an operation be weighed against its clinical outcomes and financial costs?
- 9. How can environmental sustainability be incorporated into the organisational management of operating theatres?
- 10. What are the most sustainable forms of effective infection prevention and control used around the time of an operation (e.g., PPE, drapes, clean air ventilation)?



# Anaesthesia the Norwegian way

If we are lucky, we are merely asked to do more with what we already have. But sometimes if we're unlucky, it may be that we must do more but with even less. Such is life in the NHS. Shortfalls in the number of consultant anaesthetists are not new, and more consultants are working beyond the age of 60 than ever before [1].

But maybe there is a way we, as anaesthetists, can do more - we can be more effective in how we work but without compromising on personal burnout. We might even have a better quality of life in the process. Norway has been listed as the top nation for human development (the UK is placed 13<sup>th</sup>) [2] - could we also learn something from the Norwegian model of anaesthesia practice?

I count myself very lucky. I finished my anaesthesia training in 2016 and took up a consultant position enjoying a busy, varied practice. Four years and one child later the discussion was raised about moving to Norway (my wife is Norwegian). Six months later I would find myself in a different country, fumbling my way in a different language and also working very differently, but much more happily - I was working with anaesthesia nurses.

Gone was the classic one anaesthetist, one surgeon, one patient and one operating theatre. I was now covering two theatres simultaneously. Standard practice is that we induce anaesthesia (in whatever form) with an anaesthetic nurse. Once the patient is stable I am free to attend to other things. The department is therefore much more dynamic and flexible, since we have the time between patients to dedicate to other things. We are freer to help each other with difficult cases. We are also more balanced in our capabilities, because as we learn new techniques it is much easier to teach others since we have the time to supervise and train. Having a colleague by one's side in theatre for induction of anaesthesia no longer means pulling them away from another theatre.

So surely there are downsides? Not really, but it is a different way of working. An anaesthetic isn't going to work very well if it's so complex that you have to be in the room with the nurse the whole time. Pre-operative assessment has to be robust. We are responsible for more patients, but that responsibility is shared with our nursing colleagues. Anaesthesia care is much more uniform and less dependent on any individual doctor; it reflects the department as a whole.

As a trainee I was sceptical about the implementation of anaesthesia associates. I was convinced that they would come to undermine training (stealing all the good bits) and the specialty as a whole (why bother with a doctor when a nurse can do the same job?). I believed that the triad of anaesthetist, surgeon and patient was irreplaceable. However, after two years of working with anaesthesia nurses I am convinced of their value. But you needn't take my word alone for it - you can hear it from two trainees and a nurse themselves....

#### Anaesthesia nurse perspective

The career of an anaesthetic nurse is exciting, varied and comes with significant responsibility. It is also highly competitive. A minimum of two years experience working as a nurse is mandatory, and this must come in a related field (internal medicine for example) before applying for training. On average there are 30 applicants per training position. Study is usually carried out full time with financial support from the employing hospital, with a commitment to work as an anaesthesia nurse upon graduation for two years. Training lasts a minimum of 18 months, but can be extended to two years to complete a thesis and acquire a Masters.

Practice as an anaesthesia nurse is tightly regulated with defined standards of what an anaesthesia nurse can do alone or with a doctor present. These same guidelines also establish the areas of responsibility for anaesthesia nurses and physician anaesthetists [3]. Briefly, anaesthesia nurses are expected to be competent to assist with induction of anaesthesia (including preparation of medicines and equipment), maintenance of anaesthesia (both volatile and TIVA), airway control (mask ventilation, intubation and supraglottic airway insertion), and waking patients from anaesthesia. Anaesthesia nurses (working as a pair) can also induce anaesthesia in simple cases without a doctor. Additional skills (arterial lines, PICC lines and regional anaesthesia techniques) can be learnt, but this is dependent upon both the nurse and anaesthesia department approval.

New trainees in anaesthesia will often spend a good deal of time in the operating theatre with us to experience maintenance of anaesthesia as surgery progresses and to anticipate and handle to changes in physiology, patient position and surgical stress. There is a clear focus to prioritise training of new doctors, and it is the role and responsibility of anaesthesia nurses to facilitate this as much as possible. 'Stealing' procedures from trainees is culturally unacceptable and considered as completely against our ethos.





#### Anaesthesia trainee perspective

Anaesthesia is unique in Norway - in no other speciality do nurses and doctors work so tightly where it can at times seem difficult to differentiate between the two. Both can induce anaesthesia, intubate and wake patients. However, there are distinct differences. In the first phase of training, it can be daunting to work with anaesthesia nurses. They have more experience, better skills and overall command over anaesthesia. Instead of a threat, this is seen as an opportunity for learning and teaching. Anaesthesia nurses give an additional perspective and form an additional source of learning.

Naturally, competition around procedures can occur. However, there is an established culture that doctors in training take priority. At times it's not the nurses that want to do things but our own bosses! Having anaesthesia nurses to maintain anaesthesia prevents us being tied to a specific operating theatre, and so we are then free to pick up procedures in other places. After the initial learning phase is over a new challenge occurs when we transition to taking on more responsibility and making decisions on our own. Normally this occurs gradually as we gain experience and demonstrate our capability, supported by our consultants.

We couldn't imagine working without our nursing colleagues!

#### Summary

Anaesthesia practice in the UK has a long and established tradition. Worldwide it is extremely highly respected (I can vouch for that personally when I started working in Norway). Anaesthesia Associates may well mark one of the biggest changes in the provision of anaesthesia in the UK. If it's anything like how it is here in Norway, it will most likely be a change for good.



This article represents the authors' personal views and not those of any organisations in Norway or the UK

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# Working with the media during the pandemic

While the NHS was pushed to the brink in fighting its first global pandemic, the media wrote their perceived version of history and the nightmare was conveyed, with varying degrees of truth, for all to see. The media played a particularly important role in our own narrative arc, with ownership of the story and engagement with the media transforming the story.

Northwick Park Hospital was vulnerable to be hit hard by the pandemic. Situated in the outskirts of north-west London and close to Heathrow Airport, it serves an ethnically diverse population with significant levels of social deprivation, as highlighted in a Guardian article detailing how poverty and racial inequalities led to a high number of admissions and deaths at our hospital.

March 2020 saw rapidly escalating numbers of patients requiring ICU admission. This outstripped the worst of our predictions and we were overwhelmed. On 19 March 2020, with critical care areas full and patients being ventilated in operating theatres, we declared a critical incident at a time when the nation was fearful about the ability of the NHS to cope. We became the leading subject for many major news outlets, with BBC News reporting our daily mortality figures: we were thought to be a looking-glass into what lay ahead for other hospitals.

The heat of the spotlight intensified. BBC Newsnight questioned our clinical decision making, asking whether we had been managing patients in the most resource-efficient way by mechanically ventilating critically unwell patients with COVID-19. In the absence of international consensus, and given the volume of patients we were seeing, this scrutiny from media outlets did not sit well with our lived experience.

During the first wave our Trust allowed cameras to film in COVID-19 clinical areas for the first time, with the BBC News at 6 releasing a report from our wards. Being one of the first NHS Trusts to permit filming in clinical areas meant that the public were finally seeing first-hand the relentless work inside ICU. Increased media exposure enabled positive news stories to emerge; details of two of our own nurses for whom we cared caught the imagination of the public, while the local press published tales of heroism when three members of staff were recognised in the Queen's Honours list.



Emerging from the first wave, we knew the positive impact that media reporting could have to counter misinformation and help strengthen the case for lockdown measures and vaccine uptake. We embraced the opportunity to show how COVID-19 resurgence was affecting us. A series of early print and televisual news pieces reported on Trust-wide activity, including items by BBC Newsnight, ITV News, and the Independent. A year on from the first wave, we reflected on the events leading up to our declared critical incident in retrospective pieces for the Telegraph and Sky News.

Employing a progressive attitude to media engagement changed the portrayal of our story. Our Trust communications team describes a productive relationship with the media as being reciprocal and mutually beneficial, stating *"there is always opportunity in a crisis if you are bold enough to take it"*. As medical professionals we are reminded about patient confidentiality, and there is often an inherent caution in engaging with media outlets. Frank conversations with journalists meant balancing access with an agreement that their coverage reflected our experience.

Moving forwards, there should be less fear about healthcare institutions engaging with media institutions - there is the potential for a symbiotic relationship, with the power to inform and empower at a time when misinformation is so easy to come by.

#### **Rhys Gravell**

Junior Clinical Fellow in Intensive Care

#### Majid Zaki

Anaesthetic Registrar

**Viv Sathianathan** Intensive Care and Anaesthetic Consultant

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References are available from the authors on request







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# Inequalities in health this year: how does it affect pre-operative care and recovery?

Inequality in health refers to systematic and avoidable differences in the health of certain populations. As a result, some individuals are exposed to worse health outcomes and experiences compared with others. The COVID-19 pandemic has exposed and exacerbated long-standing health inequalities, as it has disproportionately affected those from ethnic minority backgrounds and those living in more deprived areas. The socioeconomic ramification of the pandemic is set to have the greatest repercussions on those already experiencing the worst health outcomes, further widening health inequalities. This essay will focus specifically on the impact of health inequalities in pre-operative care and recovery.

### The effect of the COVID-19 pandemic on healthcare

Pre-pandemic, NHS trusts were struggling to keep up with the rising demand on services, resulting in long waiting lists. In April 2020, all elective operations were cancelled, leading to a 44% rise in the number of people waiting for hospital treatment in England by July 2021 [1]; however waiting lists grew disproportionately at 55% in the most deprived areas compared with 36% in the least deprived areas [2]. Infection control measures, delays, and cancellations because of testing and isolation resulted in an increase in surgical backlog, higher morbidity and poorer prognoses. This burden was also higher in deprived areas. Analysis by the King's Fund found that those living in less affluent communities are almost twice as likely to wait over a year for treatment than those living in less deprived areas [2].

The risk of severe COVID-19 infection and mortality is increased in older people and people with underlying medical conditions. These include non-communicable diseases such as diabetes, hypertension, asthma, COPD, cancer, and cardiovascular disease that are associated with the social determinants of health. Ethnic minority groups, people living in deprived areas and in poverty are more likely to suffer from multiple non-communicable diseases at a younger age, therefore they are more likely to experience more severe infection and death from COVID-19. Face-to-face work continued for many low income workers, particularly those working in the health and service sectors. Many of these key workers already had increased risks of morbidity and mortality that multiplied because of their requirement to use public transport. The burden of COVID-19 was greater in those living in overcrowded housing and precarious employment, as the risk of transmission was higher and the absence of paid sick leave accelerated the spread of disease. Statistics show that black people were 3-4 times more likely to die from COVID-19 than white people, and the risk of men in low-skilled jobs dying was also quadrupled [3]. The pandemic ensured that those who would be most affected by the virus were in fact more likely to be exposed to it.

#### Pre-operative care

Primary and secondary healthcare facilities discouraged in-person consultations to minimise the risk of infection, resulting in online interactions. Anaesthetists performed virtual preoperative appointments and reported that, as an accurate airway assessment wasn't conducted, patients who had a difficult airway could only be thoroughly assessed on the day of admission. Digitalising healthcare during the pandemic reinforced health inequalities as it assumed access to technology as well as technological literacy. If healthcare continues to be digitalised, this could alienate individuals and worsen problems associated with access to healthcare in lowincome groups.

The implementation of lockdown measures had an impact on physical health. One survey found that 61% of respondents reported a reduction in physical activity, and that older people in the most deprived groups were also more likely to be inactive than those in less deprived groups [4]. The British Journal of Anaesthesia reported that this sedentary behaviour could lead to deconditioning through poorer cardiovascular health, cancer, and diabetes as well as 'additional premature deaths' [5], and therefore more likelihood of developing intraoperative complications.

Maternal mortality is influenced by ethnicity and deprivation. MBRRACE-UK details that black women are four times more likely to die during the stages of pregnancy and childbirth than white women; women from more deprived areas face a tripled risk of death [6]. The risk was amplified during the pandemic as procedures such as neuraxial anaesthesia are made technically challenging and less time efficient due to PPE. To lessen the risk, shared, early and informed decisions need to take place to maximise safety.

#### Recovery

A cohort study in hip fracture surgery patients found that COVID-19-positive patients had increased postoperative complication rates than COVID-19-negative patients (89% versus 35%) and mortality rates (30.5% versus 10.3%). Risk

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factors for increased mortality included positive smoking status and > 3 comorbidities, conditions that prevail in low-income groups [7]. COVIDSurg reported that 50% of patients with peri-operative COVID-19 developed pulmonary complications, worsening postoperative outcomes compared to pre-pandemic complication rates [8]. Throughout the pandemic patients delayed seeing doctors and avoided Emergency Departments because of fears of becoming infected, shown by an 84% reduction in NHS cancer pathway referrals. When such patients do present, they will experience greater disease progression, longer stays in hospital and have impaired recovery.

#### Conclusions

The COVID-19 pandemic highlighted and intensified health inequalities in the population. Ethnic minority and low-income groups experienced the highest mortality during the pandemic, attributed to high-risk occupations, the presence of preexisting conditions and living in deprived areas. These factors, coupled with structural racism, all interact negatively. It is the responsibility of policymakers to address barriers to equitable care and improve peri-operative health outcomes for those suffering deprivation in our society.



**Devika Tandon** Medical Student St George's University of London

Twitter: @devika\_t99



## From idea to INNOVATION

### Entries are now open for the 2023 Award for Innovation in Anaesthesia, Critical Care and Pain

Recognising and rewarding ideas and innovation in healthcare.

The Association invites applications for the 2023 prize for innovation in anaesthesia, critical care and pain. This prize is open to all anaesthetists, intensivists and pain specialists based in Great Britain and Ireland. The emphasis is on new ideas contributing to patient safety, high quality clinical care and improvements in the working environment.

#### Entries will be considered in 4 categories:

- New product
- IT and digital innovation
- New technique or solution of a problem
- Sustainable environmental impact

Deadline to apply: 28 September 2022

Association of Anaesthetists For more information and to submit your application, please visit anaesthetists.org/Innovation



# Telling the remarkable story of anaesthesia

From its first public demonstration in 1846 to modern day anaesthetists working in the aftermath of wars and terrorist attacks. The Anaesthesia Heritage Centre is located in central London and is free to enter.



The Association of Anaesthetists Heritage Centre is open Monday to Friday 10:00 - 16:00 (closed bank holidays). Last admission is 15:30.

#### www.anaesthetists.org/heritage



### 24th Anaesthesia, Critical Care and Pain Forum

Da Balaia, The Algarve 26-29 September 2022

www.doctorsupdates.com education in a perfect location<sup>®</sup>

# Difficult Airway Society UK airway database - the experience so far

Appropriate communication of potential airway difficulties to the patient and their GP is an important aspect of difficult airway management, but is poor in practice [1, 2]. Inadequate communication between the anaesthetist who identifies a difficult airway and the one providing the anaesthetic might allow harm to the patient. As patients access different hospitals for different episodes of care, documentation within the patient record alone is not adequate. There have been several attempts worldwide to develop hospital based, regional and national difficult airway alert systems [3].

For an electronic difficult airway database to be effective, the following criteria should be fulfilled:

- round-the-clock availability and easy access to the database for clinicians
- robust data security measures
- easy data submission
- availability of adequate information to plan future airway management

A 2-year DAS pilot project for a new database was performed in 2016 at around 25 hospital sites, including an end-user feedback survey. The database was launched nationally in 2018, incorporating feedback and suggestions from the pilot sites.

#### **Current status**

As of May 2022, 186 hospitals are participating from all four devolved nations, including both the NHS and private sector. As of today 1120 cases have been submitted to the database, and more than 1200 anaesthetists have registered with the database for submission or access to data. DAS members do not require separate registration, and therefore 4500 clinicians can currently access the database. The DAS database is supported by the Association of Anaesthetists, RCoA, SALG, SOBA, OAA, SEA-UK, Society for Computing and Technology in Anaesthesia, College of Operating Department Practitioners and the Association for Perioperative Practice.

#### How may we join the project?

The only requirement is a letter of confirmation from the information governance department or Caldicott Guardian stating that they are happy for the hospital to join. Upon receiving this confirmation, the hospital will be added to the system and can then start submitting data. The local lead role is usually taken by the Airway Lead, but any consultant or senior SAS doctor with an airway interest can take up the role. They will be the point of contact between DAS and their hospital, and can help to increase awareness of the project among their colleagues.

#### How to submit a case?

When a registered anaesthetist [4] encounters a clinically significant difficult airway and believes that the information from the encounter will help plan future airway management, they can submit to the database (Figure 1). Patients must be provided with the information leaflet available on the DAS website [4] and provide consent. An online form requests the patient's information, airway assessment and details of the difficult airway incident. Trainees must discuss the case with their supervisor before submitting the case. Upon receiving the information, DAS posts an airway alert card (Figure 2) to the patient that contains key airway information and a unique code that can be used to access the online database.

#### Data flow and data security

To keep patient identifiable data safe, the project uses a twopart system (Figure 3), comprising a pseudo-anonymised online section with no patient identifiable data, accessible to registered doctors, and an offline section that stores the patient identifiable data. Other measures include a Secure Sockets Layer (SSL)® encrypted website hosted on an ISO certified UK server. Pretty Good Privacy (PGP)® encryption is used for transfer of patient identifiable data to the bit-blocker® encrypted offline system. Anaesthetists must register on the database using a recognised NHS email address (or the corporate email ID in the case of private hospitals) and their GMC number. DAS is registered with the Information Commissioner's Office and NHS Digital Toolkit, and regular internal governance review is conducted by the Specialist Societies Officer of the Association of Anaesthetists.

#### What do patients think about the project?

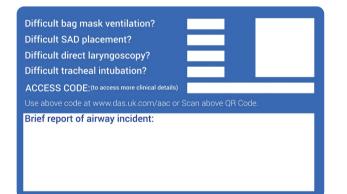
We conducted a patient survey in 2020 [5] that demonstrated provision of a difficult airway alert card was perceived as a useful safety initiative by all patients. A quarter of recipients used it in subsequent episodes of anaesthesia care. Areas that required improvement were the need to improve communication before data submission, and the need to improve awareness among anaesthetists and GPs.

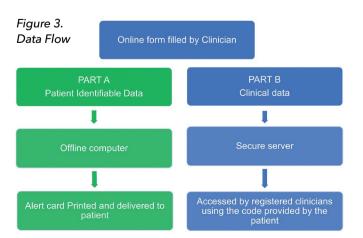
#### Figure 1. Process of submitting a case to the DAS Database

# DIFFICULT AIRWAY ALERT CARD Show this card to your anaesthetist if you need an operat Name: DOB: NHS No: Date of event: Hospital:

Figure 2. Alert Card

Issued by Difficult Airway Society (DAS), UK formation including reporting lost card visit\_www.das.uk.com





#### Achuthan Sajayan

aspects of decision making.

Consultant Anaesthetist, University Hospitals Birmingham Co-Lead, DAS Difficult Airway Database

systems, a digital alert card, and a mobile-friendly version of the database are also being planned. There are plans to extend

record numbers (MRN) along with the NHS number.

access to more private patients by including the private medical

The primary purpose of the database is to provide information on previous airway difficulty to allow the formulation of a clear

extensive information that can be used for airway research and learning. Descriptive analysis of the data from the first five years

airway management plan. However the database contains

is now complete and submitted for publication, and we are

planning further exploratory analysis including human factors

#### Fauzia Mir

Consultant Anaesthetist, St George's Hospital, London Co-Lead DAS Difficult Airway Database

#### Karthik Ponnusamy

Consultant Anaesthetist, Hamad Medical Corporation, Doha Developer of DAS Difficult Airway Database

Twitter: @Sajay70; @ponkarthik

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# Winter Scientific Meeting 2023



### Thursday 12 - Friday 13 January 2023, QEII Centre, London

Join us for our first in-person **Winter Scientific Meeting (WSM)** in two years. As a hybrid conference, you also have the option to attend online.





Association of Anaesthetists



### Final call for abstracts

Last chance to submit abstracts for poster presentation in the following categories:

- Audit & quality improvement (QI)
- Case Reports
- Original Research
- Survey

# NELA sponsored trainee poster prize



Trainees are invited to submit an abstract and poster that uses hospital NELA data to improve patient care.

The deadline to submit abstracts and enter the NELA trainee poster prize is 23:59 on **Wednesday 10 August 2022**.

### anaesthetists.org/WSM

# Turbulence in corrugated tubing

When Dr Alastair Lack introduced his new eponymous breathing system, intended to facilitate scavenging of expired gases and reduce operating theatre pollution [1], it was compared inevitably and unfavourably with the existing widely-used Magill system. It appeared to function well in practice, but reports were inconclusive [2].

Clinical observations suggested a difference in efficiency demonstrated by minimum fresh gas flow requirements before the onset of re-breathing, indicated by increasing tidal volume or respiratory rate, in spontaneously-breathing patients during general anaesthesia using a facemask. We found that the minimum fresh gas flow rate required using the Lack system was approximately 40% less, being mean 6.23 l.min<sup>-1</sup> in 183 patients versus 8.32 l.min<sup>-1</sup> for the Magill system in the same patients.

Both are Mapleson A systems, but the geometry is different. In the Magill circuit, expired gases mix with the fresh gas. In the Lack co-axial system, end-expired gas vents directly into the central tubing to the expiratory valve with little or no mixing with fresh gas. But some unusual results led us to study flow patterns in different tubing. We measured turbulence, assessed by detecting the cooling effect of increased air movement over a heat probe, over the cross-section of corrugated anaesthetic tubing at gas flow rates between 2-30 l.min<sup>-1</sup> [3]. The smooth walls of the Lack system generate little turbulence. In the corrugated tubing of the Magill system, however, the layers near the boundary became increasingly disturbed as flow increases (Figure 1). It is likely that this boundary layer turbulence increases mixing of inspired and expired gas. This, together with the position of the expiratory valve, adequately explains the differences observed between these systems.

#### Michael R. Nott

Retired Consultant Anaesthetist St Richard's Hospital, Chichester

#### References

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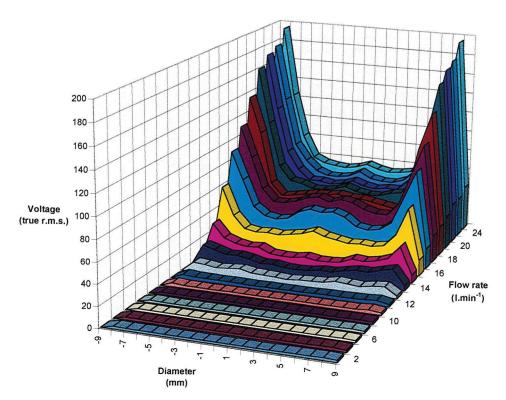


Figure 1. Turbulence (expressed as voltage [true r.m.s.]) across the diameter of corrugated tubing, as a function of increasing flow rate plotted on z-axis.

# **Annual Congress 2022**

14-16 September 2022, ICC Belfast, Northern Ireland

# Workshops are back for Annual Congress 2022

Annual Congress 2022 in Belfast is just over a month away. Have you booked your ticket? Don't miss our first fully in-person scientific conference in over two years. Book today and join us at the ICC Belfast on **14-16 September 2022**. Special discounts are available for Association members.

#### More CPD and exciting new ways to learn

We have a packed programme to mark our return to inperson education and the 90<sup>th</sup> Anniversary of the Association. Offering you more CPD than ever before and exciting ways to come together with friends and colleagues to learn and share experiences. Annual Congress 2022 promises a wide and diverse range of expert speakers, representing Ireland, UK and internationally, and lecture formats, including TED style talks, Q&As, debates, workshops, live demos and simulations.

#### **Interactive learning**

Techniques and technology within the specialty are evolving rapidly, more so since the COVID-19 pandemic. To help keep up with developments, we've lined up many practical workshops, demos and live simulations: you can get hands-on experience of focused echo, ECMO, regional anaesthesia, ultrasound, airways, regional blocks, and more. You can even put yourself at the centre of a critical incident with real-life live simulation.

"We're excited to be bringing ECMO workshops to Annual Congress 2022. The use of ECMO has played a key role in H1N1 and the COVID-19 pandemic. As a specialist area with a limited number of commissioned centres and consultants, getting access EMCO can be a challenge for anaesthetists. Delegates attending Annual Congress 2022 will be able to get hands on experience at the ECMO workshops that draw on the experiences of real patients and include clinical images, scenarios and simulation." Dr Mike Charlesworth, Consultant Anaesthetist and ECMO workshop faculty at Annual Congress 2022.

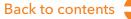
## More reasons to attend Annual Congress 2022

#### **Destination Belfast**

With its rich mix of history, culture, shopping, dining and music, plus great transport links and accommodation options, Belfast is an ideal destination for a city break. So why not stay on after Annual Congress? You can choose to stay within the city limits, or travel further afield to explore the beautiful countryside of Northern Ireland.

#### **Discounts for members**

Association Members benefit from exclusive booking discounts rates: Trainee member save up to £360 and Full members save up to £235 on the non-member rate. For more information and to book, please visit **anaesthetists.org/AnnualCongress** 



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**Dr Rosie Hogg** Consultant Anaesthetist, Belfast and speaker at Annual Congress 2022

#### My top five reasons for attending Annual Congress 2022

#### 1. Connection

We have all certainly had a challenging two and a half years since the Association's last fully in person meeting in London in January 2020. While virtual education has transformed the way we learn, the need for connection, reflection and collaboration is stronger than ever. This is reflected in the diverse and inclusive programme that Annual Congress 2022 has to offer. Reflecting on the challenges of not just of the pandemic, but in our specialty and our society as a whole.

#### 2. Keynote speakers

The variety of speakers at this year's Congress is truly impressive and none so than the five keynote lectures. From author and former children's laureate Michael Rosen discussing his experience in intensive care in the first wave of the pandemic to **Dr Noelle Healy**, anaesthetist and five-time winner of the All-Ireland Ladies' Gaelic Football Championship with the Dublin Senior team describing how to develop teamwork and a high performance environment these are sure to be fascinating and informative. Ms Deborah Eastwood, BOA Vice-President, will be discussing the topical subject of waiting lists and how we might address this seemingly insurmountable problem. While Professor Luke O'Neill will be sharing his expertise in the immunological effects of COVID-19. And of course, no visit to Belfast would be complete without a Titanic story, this one from Dr John Martin, great nephew of the assistant surgeon on that ill fated voyage.

#### 3. Breadth of education

There really is something for everyone, no matter what your clinical practice may be. This year is going to be different in several ways - get ready for a more collaborative experience with live, on-stage demonstrations and plenty of opportunities for audience interaction.

Parallel streams showcase a diverse range of topics and discussions: maybe consider a session that you might not have attended in previous conferences. I'm particularly looking forward to the challenges in the workplace, international relief in a crisis and advancing women's health sessions, and of course the future of surgery after the pandemic, a particular interest of mine.

#### 4. Workshops

Ever thought "I would really like to know how to do that" - well here is your chance. There is a huge range of practical, hands-on workshops running in parallel to the scientific programme, with national and international experts on hand to develop your skills. Choose from perioperative point-of-care ultrasound, ultrasound-guided regional anaesthesia, focused TOE, ECMO, critical incident simulation or airway videolaryngoscopy. There are also sessions on the use of social media and how to publish a paper - there really is something for everyone!

#### 5. It's Belfast so the craic is going to be 90

If you've never been to Belfast you are in for a real treat, and if you've been here before you'll no doubt be itching to get back! We've got a unique blend of traditional and modern culture with a rich historical background and some of the most welcoming people you'll ever meet. Take a black taxi tour to learn about the history of the Troubles, visit the Titanic Museum, Crumlin Road Gaol or St George's Market to get a real feel of the city. Alternatively just enjoy a walk around the beautiful Botanic Gardens or Stormont Estate. Make a weekend of it and visit the Giant's Causeway, do a Game of Thrones tour or hike in the beautiful Mourne Mountains.

#### To book your place for Annual Congress 2022 in Belfast, visit anaesthetists.org/Home/Education-events/Annual-Congress-2022



# July's History quiz answers

- 1. Before 1750 CE, many drugs and techniques were used to alleviate pain. Which one of the following is the exception?
- a. Laudanum
- b. Dwale
- c. Morphine
- d. Soporific sponge
- e. Cannabis

All the options were used to alleviate pain, but Sertuner did not isolate morphine from opium until 1804.

- 2. On 16 October 1846 in Boston, Massachusetts, Edward Gilbert Abbott was given a general anaesthetic for the removal of a tumour from his jaw. Who gave the anaesthetic?
- a. Horace Wells
- b. John Collins Warren
- c. Crawford Long
- d. William Morton
- e. Jacob Bigelow
- 3. The first general anaesthetic in England was given by a:
- a. Surgeon
- b. GP
- c. Medical student
- d. Dentist
- e. Nurse

Dentist James Robinson gave the first anaesthetic in Gower Street, London for a tooth extraction.

- 4. Which of the following is TRUE of John Snow?
- a. He rode to London on his father's horse
- b. His first dwelling in London was in Frith St
- c. He qualified first as MRCS and later as LSA
- d. He qualified first as MBBS
- e. He later qualified as MRCP

He walked to London and his first dwelling was in Batemans Buildings, next to Frith St where he became a general practitioner. MBBS followed his other qualifications, and then MD. He never became MRCP.

#### 5. Concerning Joseph Lister, which of the following is FALSE?

- a. He was an undergraduate at UCL
- b. He became professor of surgery at Glasgow, Edinburgh and King's College London
- c. He was a strong supporter of the use of anaesthesia in surgery
- d. His work with antisepsis preceded that of Pasteur, who was to be inspired by Lister's work
- e. He became a Baron and surgeon to Queen Victoria

That is, Pasteur came first and inspired Lister.

#### 6. Concerning Joseph Clover, which of the following is TRUE?

- a. He studied medicine at Guy's Hospital
- b. He went straight into anaesthesia after qualifying in medicine
- c. He anaesthetised many royal and aristocratic patients, including Queen Victoria
- d. Unfortunately ill health severely affected him and he died in penury
- e. His famous method of delivering chloroform (the Clover bag) was derived from an idea of John Snow's

Joseph Clover studied medicine at UCH and became a surgeon before becoming a GP anaesthetist. He did anaesthetise many royal and aristrocratic patients but not Queen Victoria. He left his family well provided for, far from penury.

- 7. In which city was chloroform first used as an anaesthetic?
- a. Glasgow
- b. Edinburgh
- c. London
- d. Paris
- e. Boston, USA

James Simpson was responsible.

- 8. Apart from his mask, what else did Schimmelbusch invent?
- a. An aseptic apparatus similar to an autoclave
- b. A calibrated syringe
- c. A calibrated vapouriser
- d. Electrocautery (diathermy)
- e. A bellows for inflating the lungs

Apart from his mask, Schimmelbusch had little to do with anaesthesia.

- 9. Regarding chloroform, which of these statements is TRUE?
- a. In strong sunlight it degrades releasing phosgene
- b. It was first synthesised in 1805
- c. It has a pungent unpleasant-smelling odour
- d. It was found to be poorly tolerated in obstetrics
- e. Its use is complicated by aplastic anaemia

Chloroform degrades in sunlight releasing phosgene, hence it was kept in coloured glass bottles. It was first synthesized in 1831. It has a pleasant odour, was very well tolerated in obstetrics (Chloroform a la reine!); aplastic anaemia was not reported.

### 10. Regarding nitrous oxide, which of these statements is TRUE?

- a. It was synthesised and first used by Sir Humphry Davy in 1811
- b. Horace Wells had a triumphant demonstration of its use in Boston in 1846
- c. Gardner Quincy Colton was instrumental in popularising its use in the USA and the UK
- d. The widespread use of nitrous oxide in dentistry was delayed until 1888
- e. The recreational use of nitrous oxide is a modern-day phenomenon

Colton formed his company Colton Dental Associates to promote nitrous oxide. Nitrous oxide was manufactured by Joseph Priestley in 1772. Davy never used it as an anaesthetic. Horace Wells' demonstration of the use of nitrous oxide in Boston in 1846 was pretty much a disaster, but Colton helped to introduce it successfully into dental practice in the 1860s, first in the USA and then Europe. Nitrous oxide was an early 'recreational' drug.

### 11. Regarding cyclopropane, which of these statements is TRUE?

- a. It was discovered in 1881 and used shortly thereafter as an anaesthetic
- b. It was used primarily for long term maintenance of anaesthesia
- c. It was introduced by Ralph Waters in the USA
- d. The explosive risk with cyclopropane was less than with diethyl ether
- e. Recovery from cyclopropane anaesthesia could be associated with severe hypertension

Cyclopropane was introduced by Prof Ralph Waters in the USA. It was indeed discovered in 1881 but it was not used as an anaesthetic until 1929. It was used primarily for induction and short term anaesthesia partly because of the explosive risk. Recovery could be associated with hypotension; so-called cyclopropane shock.

#### 12. Which of the following statements is TRUE?

- a. Ivan Magill was the first president of the Faculty of Anaesthetists of the Royal College of Surgeons
- b. Robert Macintosh was the first professor of anaesthesia in the world
- c. HEG Boyle was one of the first two examiners for the Diploma in Anaesthesia
- d. Eric Silk was the first President of the Society of Anaesthetists
- e. Dudley Buxton was the first President of the Association of Anaesthetists

HEG (Cocky) Boyle was one of the first examiners of the DA (along with CW Morris) Archibald Marston was the first Dean of the Faculty of Anaesthetists in the Royal College of Surgeons, and Ralph Waters was the first professor of anaesthesia in the world (Macintosh was the second.) Silk founded the Society of Anaesthetists but Woodhouse Braine was the first President. Henry Featherstone was the first president of the Association of Anaesthetists.

### 13. Which of the following statements about the Association of Anaesthetists is TRUE?

- a. It was founded in 1938
- b. Initially it took little part in education
- c. It was prevented by statute from setting exams
- d. It was formed directly from the Society of Anaesthetists
- e. It opposed the founding of the Faculty of Anaesthetists of the Royal College of Surgeons of England (now the Royal College of Anaesthetists) in 1947

The Association of Anaesthetists was founded in 1932; the immediate precursor was the anaesthetic section of the Royal Society of Medicine, not the Society of Anaesthetists. It was formed with the specific intention of setting a diploma exam, amongst other things, and was a strong supporter of the founding of the Faculty of Anaesthetists of the Royal College of Surgeons of However, initially it took little part in education, leaving that role to the RSM.

### 14. Regarding monitoring and equipment, which of the following statements is TRUE?

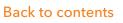
- a. The Gwathmay anaesthetic machine was a later modification of the Boyle anaesthetic machine
- b. The Magill-bladed laryngoscope was similar to the straight-bladed Chevalier Jackson laryngoscope
- c. The use of the first intravenous cannula was described in 1945
- d. Blood pressure measurement using an occluding cuff preceded intra-arterial blood pressure measurement by approximately 30 years
- e. The electrocardiogram was invented by Einthoven in 1923

The Magill straight-bladed laryngoscope was of course superseded by the Macintosh curved blade. Boyle's machine was a modification of the Gwathmey machine. The angiocath i.v. cannula was released in 1950, but other experimental devices were released around 1940.Intra-arterial blood pressure was first measured by Sir Stephe Hales in 1733 in a horse. This was long before cuff measurement, invented by Samuel Siegfried Karl Ritter von Basch in 1881. The electrocardiogram was invented by Waller in 1887, but Einthoven defined the waves and refined it, winning the Nobel prize in 1924.

### 15. Regarding regional anaesthesia, which of the following statements is TRUE?

- a. August Bier was responsible for the first epidural block in 1921
- b. Fidel Pages first described the spinal block in 1898
- c. In 1885 William Halsted performed the first brachial plexus block under direct vision
- d. The first percutaneous brachial plexus block used the axillary approach
- e. In 1884 Koller carried out the first surgical procedure using cocaine infiltration, removing a lump from a patient's scalp

Pages was responsible for the first epidural in 1921; Bier performed the first spinal block in 1898. The superclavicular route was the first percutaneous route, and Koller was an eye surgeon - cataract removal was the operation in question.



# **SAS Committee - vacancies**

The Association is seeking an individual with interest, energy and commitment to join the SAS Committee. This is a great opportunity to help the Association continue to engage with and advocate for SAS doctors.

#### Eligibility

- There is currently one vacancy on the committee, and all appointments are for an initial one year term, renewable annually up to a maximum of four years in total, with consent of the SAS Committee Chair and the Honorary Secretary
- All applicants must be a SAS member of the Association. This position is open to anyone belonging to this membership group, including long-term trust doctors. Applications will be checked before interview to ensure candidates are in the correct membership group. Committee members will be required to attend three half day committee meetings per year either held in London or virtually, and devote sufficient time to the role
- Committee members will be asked to represent the committee at other internal or external meetings, such as other Association committees or on the working parties that produce Association guidelines



The full role description and more information can be found on the website https://anaesthetists.org/Home/About-us/Staff-vacancies/ Voluntary-roles.

Nominations should be submitted electronically to secretariat@anaesthetists.org. Anyone wishing to check their eligibility is welcome to contact the Association before applying.

Your nomination should include a personal statement outlining your relevant experience and reasons for applying for the role (maximum 250 words). You should also include a copy of your short summary CV.

Applications will be considered by a panel and shortlisted candidates will be invited for an interview in autumn 2022.

For further information about the role or for an informal chat, please contact via the Governance team **secretariat@anaesthetists.org** or call **020 7631 1650 (option 3)**.

# **Evelyn Baker Award**

#### An award recognising the 'unsung heroes' of anaesthetic departments.

The Evelyn Baker Award was instigated by Dr Margaret Branthwaite in 1998, dedicated to the memory of one of her former patients at the Royal Brompton Hospital. The award recognises the 'unsung heroes' of anaesthetic departments, the often unspoken backbone of the department who is the 'go to' person for clinical or other advice. The award is given to individuals who set themselves apart from peers by demonstrating an exemplary track record in clinical excellence, teaching and training, and supporting colleagues.

#### To be eligible, a nominee:

- Must be a consultant or SAS doctor in anaesthesia, usually with more than ten years in post
- Must be in clinical practice at the time the nomination is submitted (but can have retired by the time the award is presented)
- Must be a current member of the Association
- Must NOT be in possession of a National Clinical Excellence Award.

#### Nomination is by citation, which:

- Must be submitted by a current member of the Association
- Should include an indication that the nominee has broad support within their department
- May include additional comments from departmental and other colleagues.

The citation which should be of 1000 words or fewer, should explain how the nominee demonstrates outstanding competence that sets them apart from others, under the following: headings:

- Clinical excellence (encompassing technical proficiency, consistently reliable clinical judgement and wisdom, and skill in communicating with patients, their relatives and colleagues)
- Teaching and training (encompassing the ability to train and enthuse trainee colleagues is seen as an integral part of communication skill, extending beyond formal teaching or academic presentation)
- Supporting colleagues and co-workers.



The nomination and citation of up to 1000 words, should be sent to the Honorary Secretary at **honsecretary@anaesthetists.org** by **17:00 on 5 August 2022** 

The Evelyn Baker Award will be presented at WSM in 2023. Details of previous winners and further information can be found on the website https://anaesthetists.org/Home/About-us/Honours-awards/Evelyn-Baker-Medal-recipients

# Particles

Touil N, Pavlopoulou A, Barbier O, Libouton X, Lavand'homme P.

#### Evaluation of intraoperative ketamine on the prevention of severe rebound pain upon cessation of peripheral nerve block: a prospective randomised, double-blind, placebo-controlled study

British Journal of Anaesthesia 2021; **128:** 734-741.

#### Introduction

Much orthopaedic surgery is now performed in an outpatient setting, facilitated by peripheral nerve blocks allowing for prompt discharge. However, pain after discharge is not usually assessed. Higher rates of rebound pain have been found in patients who receive a peripheral nerve block compared with those who receive general anaesthesia [1, 2]. The authors' primary aim was to assess the benefit of a single intra-operative ketamine dose on the incident of rebound pain after upper limb surgery using peripheral nerve block. The secondary aim was to measure the incidence of rebound pain and look for predisposing factors.

#### Methodology

The authors performed a prospective randomised double-blinded study in patients scheduled for elective ambulatory upper limb surgery using axillary plexus block. Patients were randomly allocated to receive either a single dose of intravenous ketamine  $(0.3 \text{ mg kg}^{-1})$  or placebo. At pre-operative assessment several validated tools were used to assess pain: central sensitisation; pain catastrophising; and any neuropathic component of pain. Postoperative rebound pain was defined as pain intensity > 7 after block resolution. Postoperative pain was recorded at days 1, 4 and 30 after discharge.

#### Results

One hundred and nine subjects were included in the study, 40% of whom developed rebound pain. Pre-operative pain scores and psychophysical tests did not differ between the groups. There was no significant difference in the occurrence of rebound pain between the ketamine and placebo groups. The authors found a significant increase in rebound pain in patients having bone surgery, as well as patients who had a significantly higher maximal pre-operative pain score and catastrophising score.

#### Discussion

The authors found that a single dose of ketamine had no impact on the occurrence of rebound pain, similar to a previous larger study [3]. They found that pre-operative pain intensity and castrophising, where central sensitisation may not be involved, were risk factors. They concluded that future studies should focus on patient-specific pain management.

#### Conclusion

This useful study followed patients up after ambulatory surgery, which is not usually done in clinical practice. The conclusion with regard to the primary aim is limited by administration of only a single low dose of ketamine, but the study suggests that central sensitisation may not be involved in rebound pain.

#### **Catherine McGow**

ACCS CT3 Anaesthetics, Southport Hospital

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# Anaesthesia Digested

August 2022

# An evaluation of the outcome metric `Days alive and at home' in older patients after hip fracture surgery

Wu A, Fahey MT, Cui D, El-Behesy B, Story DA.

Days alive and at home has been increasingly used as an outcome measure for studies in peri-operative medicine. It is a patient-centred outcome, something that patients care about, and reflects not only survival but survival to a functional level that allows patients to go home rather than languishing in hospital. In this study Wu et al. explore the use of this metric on patients over the age of 70 who underwent hip fracture surgery. They found that a staggering 47% of patients had not returned home within 30 days of surgery, although this fell to 35% of patients after 90 days. These patients were all undergoing non-elective surgery and had significant comorbidity; factors associated with a failure to return home included pre-operative anaemia and dementia as well as age > 85 years. Whilst none of this is surprising, it does make the reader wonder about the rationale behind operating on patients who have such poor outcomes, and bring into sharp focus the need for shared decision making with honest discussions about expectations and the likelihood of returning home with reasonable function.

# Effectiveness of emergency surgery for five common acute conditions: an instrumental variable analysis of a national routine database

Hutchings A, O'Neill SO, Lugo-Palacios D, et al.

A similar theme is the subject of this paper from Hutchings et al. They explore emergency surgery for five common conditions, again looking at days alive at 90 days (although in this they examine days alive and out of hospital). Their aim was to look at the effectiveness of emergency surgery, about which there is a significant lack of evidence and highly variable rates for similar presentations across the NHS. This is interesting as it questions a way of working that we all take for granted - the emergency list - and turns it on its head, raising questions about the appropriateness of out-of-hours work. Certainly, in frail patients it seems that non-emergency surgery and medical management may be useful, emphasising the importance of careful pre-operative assessment!

# Carbetocin vs. oxytocin at elective caesarean delivery: a double-blind, randomised, controlled, non-inferiority trial of low- and high-dose regimens

McDonagh F, Carvalho JCA, Abdulla S, et al.

McDonagh et al. compared carbetocin and oxytocin in this non-inferiority study at caesarean section. Non-inferiority trials are very useful in cases where the difference between two treatments is small therefore requiring a massive sample size to come to any conclusion, or if we want to see if two treatments are equally effective. In this case the authors wanted to know if low-dose carbetocin would be non-inferior to high-dose, as well as to oxytocin, which it was. This has important cost implications that may be of particular benefit in the developing world, where maternal mortality rates remain unacceptably high.

N.B. the articles referred to can be found in either the latest issue of *Anaesthesia* or on Early View (ePub ahead of print)

Seema Agarwal, Editor, Anaesthesia

# **Your letters**

Send your letters to: The Editor, *Anaesthesia News* at **anaenews.editor@anaesthetists.org** 

Please see instructions for authors on the Association's website **www.anaesthetists.org** 

#### **Dear Editor**

#### Help for Ukraine

As the plight of the people of Ukraine following the Russian invasion has become more widely known, many people have offered their assistance but have been uncertain as to how best to help. The charity Safe Anaesthesia Worldwide (SAWW) has recently established contact with a mobile medical hospital in Odesa that has requested assistance for the anaesthetic service there, presenting an opportunity to provide practical aid. Many hospitals in the vicinity of Odesa have been damaged by Russian bombing leading to interruption in oxygen and electricity supplies; the delivery of a safe reliable anaesthesia service had frequently been impossible, severely restricting provision of emergency surgical treatment.

On hearing about this situation, SAWW immediately despatched two portable versions of the Glostavent anaesthetic machine (Diamedica (UK) Ltd, Barnstaple, UK). This machine weighs just 10 kg and is specifically designed to function even if pressurised gas and/or electricity supplies are interrupted. On receiving the machines, anaesthetists at the hospital were able to put them into action immediately to facilitate emergency surgery. The anaesthetists have been so impressed with the Glostavent that they have requested two more machines as soon as possible. SAWW has therefore launched an appeal for funds to provide more equipment; you can help by making a donation via our website www.safe4all.org.uk.

#### **Roger Eltringham**

President, Safe Anaesthesia Worldwide

Twitter: @Safe\_4\_all

#### **Dear Editor**

#### See sharp major?

I volunteer at an Oxfam record shop, and we are sometimes donated (new) promotional t-shirts, usually surplus to requirements once a particular tour has taken place. This one caught my eye (Figure 1), and I had to buy it in memory of all those years spent on the non-pointy end of similar objects. The band's name is on the back they are Spiritualized, and for those unfamiliar with them (like me, up till very recently...) their genre is electronica, described on Wikipedia as space rock.

A few of my fellow volunteers had been speculating about this image - one suggestion was that it was some form of light sabre, which I rather liked - so to my surprise, some years after retiring, I found myself giving a short tutorial on the geography of the intravenous cannula.

I will wear my t-shirt with pride, although I'm rather dreading being approached by a genuine Spiritualized fan in the belief that I share their level of knowledge and enthusiasm.

#### **Hilary Aitken**

Retired Consultant Anaesthetist Kilmacolm

> Congratulations to Hilary Aitken for winning August's Letter of the Month prize.



#### Music to the ears

Music is frequently played during surgery, with suggested anxiolytic and analgesic effects for the patient [1] and reduction in stress for healthcare professionals [2]. High stress levels in the operating room can negatively affect surgical and team performance [3]. Classical music at low-to-medium volume can improve surgical task performance, increasing both accuracy and speed, whereas loud music may be distracting [4].

We gave a questionnaire to 70 of our operating room personnel (20 consultants and 20 trainees - 30 anaesthetists and 10 surgeons; 15 nurses; 15 technicians; Table 1). Sixty-two preferred a low volume and seven loud. For those who expressed a preference for the music source, eight preferred loudspeakers, six a mobile phone, and one a laptop. Fifty-four respondents did not mind from which region the music originated. All anaesthetists agreed that music improves surgical speed.

Music in the operation room may be beneficial [2], and our results show that it is popular. The main caveat is that one third of respondents would rather not have music playing if it is not their own preference. Who decides what is chosen?

#### Harshal D Wagh

Consultant Anaesthetist Kokilaben Ambani Hospital, Mumbai, India



Table 1.

	Yes	No	Don't mind/not sure
Do you like music playing in the OR?		1	
Do you ask for music in the OR?		25	
If the music is not to your preference, would you rather not have it?			44
Do you think music improves the mood in OR?	62	7	
Do you think music is a distraction during surgery?	1	69	
Do you think music increases theatre efficiency?	52	5	13
Do you think music has an effect on the speed of the surgeon?	38	30	2

OR - operating room

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# **Your letters**

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#### **Dear Editor**

#### Not a perfect 10: epidural catheter markings

We thank Drs Williams and Jayasooryia for elaborating further on the lack of consistency when it comes to epidural catheter markings, and are very interested in their data assessing the quality and reliability of labour epidural analgesia [1]. We do note that there is no mention of the type of catheter used in Kingston.

The studies to which they refer outline the exact issue of our concern. Afsan et al. used Portex<sup>®</sup> while Beilin et al. used B. Braun multiorifice catheters [2, 3]. Both studies mention leaving the epidural catheter in 3, 5 and 7 cm in the epidural space, but as we outlined, the orifices may be at a variable distance from the tip. Surely it is more important to know how far the most proximal orifice of the epidural catheter is in relation to the ligamentum flavum as the key to avoiding unilateral block and catheter displacement?

Then, depending on the brand of catheter Dr Stacey used to collect his data, we will be sure to leave 3.5-4 cm of catheter in the space as Drs Williams and Jayasooryia recommend.

#### **Christiana Georgiou**

ST6 Anaesthetic Trainee Queen Charlotte's Hospital, London

#### Mohammed Jawad

Locum Consultant Anaesthetist Charing Cross Hospital, London

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#### Editor's note.

We have confirmed that B Braun catheters were used in Kingston for the duration of the data collection period outlined by Drs Williams and Jayasooryia. This discussion highlights the issue of spacing of epidural catheter orifices, an issue addressed in an old clinical trial yet not followed up by equipment manufacturers (Collier CB, Gatt SP. A new epidural catheter: closer eyes for safety? *Anaesthesia* 1993; **48**: 803-6).

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