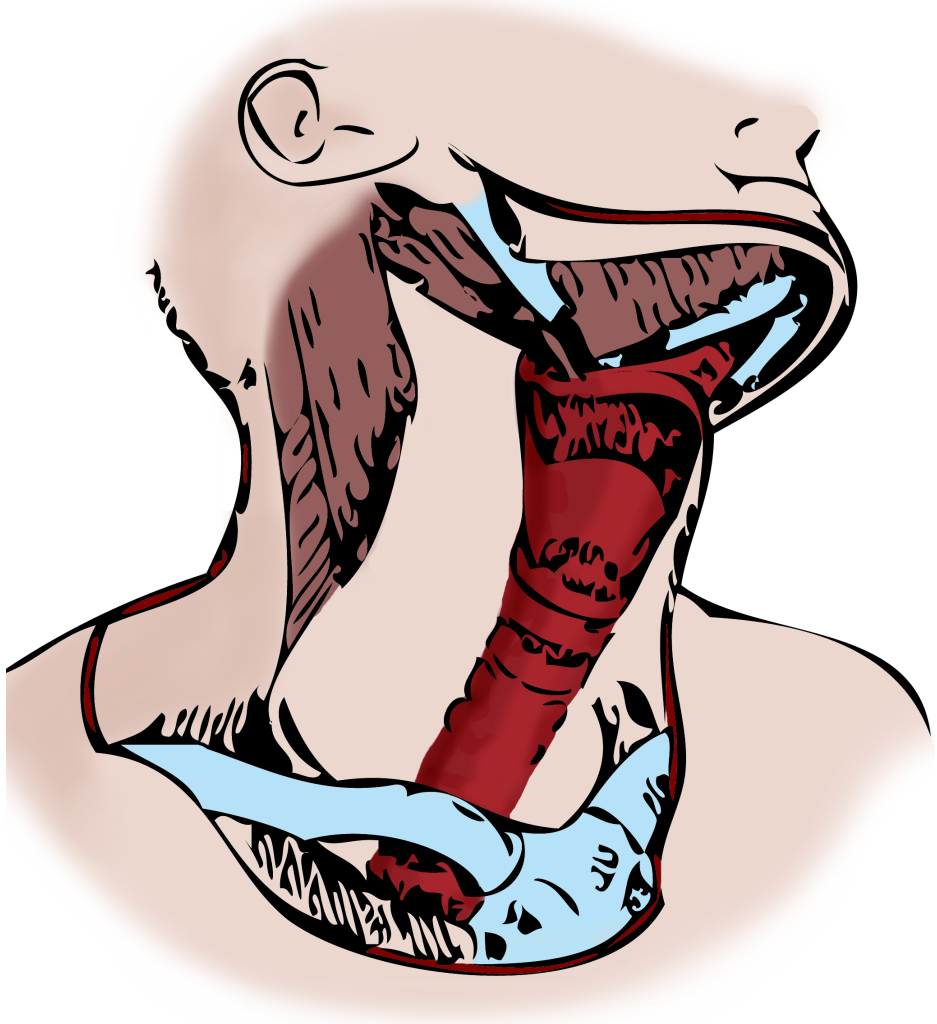
The Difficult Airway Society

Newsletter January 2011



DIFFICULT AIRWAY SOCIETY
DAS

www.das.uk.com

From the editors

Happy New Year to you all.

Last year was groundbreaking for DAS and it promises to be an eventful 2011. In this issue we look back at the very successful Cheltenham meeting and at all of the new developments where DAS has and will be playing a key role.

Last November's DAS meeting was a great success with a record number of delegates attending and an unprecedented number of abstracts submitted. The AGM saw changes for the Society - we now have a President rather than a chair (*page 3*). Also the first increase in annual subscriptions in the history of the Society was announced, Treasurer Peter Groom explains all on *page 11*. He and the newly re-elected honorary secretary, Atul Kapila outline the consequences of Direct Debit payments for you and the Society (*page 5*).

The Society is, of course, more than just its annual meeting and for those of you unable to join us in Cheltenham, DAS Scientific Officer, Jaideep Pandit explains the new ADEPT project and its wide reaching implications. As for the other DAS projects? ADAM features this month, whilst we will feature the rest in the coming months. The iPhone app iDAS is now available and we give an overview of what it offers (*page 18)*.

Our international relations have been further fostered this year with our close relationship with the American Society for Airway Management and our European cousins at EAMS. David Ball, this year's guest DAS speaker at the Chicago SAM gives his view on US airway developments. Whilst in Helsinki, Professor Flavia Petrini, chair of the Airway Section of the ESA elegantly depicts how things are done across the channel.

This newsletter sees us looking for another DAS Intavent Developing Nations Scholar (*Page 18*) to follow on from last year's Dr Zhilla. Of course, any trainee doing some research or audit will want to know where they might be able to send it and preliminary details of the Nottingham DAS 2011 are on *page 13*.

The Newsletter too continues to change, the festive season has seen both editors receive dictionaries as gifts, but whether they are used regularly remains to be seen… But seriously, we now feature an "In My Opinion" slot where you can speak your mind about airway issues close to your heart (email newsletter@das.uk.com) and include a photo. We will try and publish all we receive.

Finally, we as a Society are holding our collective breath for the main event of 2011, the release of the NAP 4 report. Nick Woodall gave us an excellent taster with his preliminary results presentation in Cheltenham with the report release date set for Wednesday 30th March at the College.

We imagine that after NAP 4 there will be much to talk about with the phrases "after NAP 4 we…" or "based on the evidence in NAP 4 we…" in common use. So expect to see much of the summer newsletter devoted to NAP 4 and its findings.

Ravi Bhagrath London — *Alistair McNarry Edinburgh*
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tween these Societies and stimulates an important exchange of ideas and practices.

Health care providers, in anaesthesia, perioperative care, intensive care medicine, emergency medicine and pain therapy must be aware of the importance of optimal airway management. This role has been emphasised by the 2008 WHO Guidelines for the patient safety and by the 2010 Helsinki Declaration on Patient Safety in Anaesthesiology.

EAMS is a young Society but thanks to the hard work of John and Pierre, Past Presidents we have a very bright future!

The European Airway Management Society, http://www.eams.eu.com/

Hands On Airway Workshop– meet the experts will be organised twice during Euroanaesthesia 2011– Sunday 12th June 2011 and Monday 13th June 2011. See www.euroanaesthesia.org for more details

IN THE NEXT ISSUE:

Reporting NAP 4 - a special edition,
Looking forward to DAS Nottingham
Guide to writing and submitting an abstract

EAMS

A brief history of the European Airway Management Society (EAMS) by the President, Flavia Petrini

The European Airway Management Society (EAMS) was founded to provide a forum for health professionals interested in airway management, a field considered crucial for safety in anaesthesia, intensive care and other areas of health care. For this reason EAMS was created as a multi-disciplinary Society.

The foundation meeting was held during the ESA Congress in June 2003, Glasgow, following a proposal by John Henderson, supported by the best experts in Europe. The founding members were: U. Braun (Germany), J. Henderson and A. Pearce (UK), P. Biro (Switzerland), F. Petrini (Italy), V. Crinquette (France), V. Voyagis (Greece).

EAMS offices are in Strasbourg, and it uses funds from industrial donations, DAS and membership subscriptions to help run airway meetings in cooperation with National Societies throughout Europe. The purpose of the Society is to encourage research, continuing medical education, scientific advancement and guidelines implementation for the best airway management, organizing and carrying out scientific events and promoting scientific studies.
Many activities are organized beyond the ESA and our annual informal dinner following the Council meeting is a very helpful means of fostering links between airway experts from European Countries.

Euroanaesthesia 2009 saw EAMS launch the new format of the Hands-on Workshop, improved the following year in Helsinki, taking into account the difference between the experience of the delegates and resources of their Hospitals. The stations were divided in "basic" and "advanced skills", using a format that required a tremendous amount of organization and the good will of many experienced tutors from the countries that constitute EAMS. It proved very successful and the Board is further improving the teaching model for the next Euroanaesthesia, in Amsterdam 2011.

In the meanwhile the EAMS members gave lectures and supported hands-on workshops devoted to airway management in many meetings and countries. A particular mention for the organisation of the Airway Management Workshop at the ISICEM (International Symposium on Intensive Care and Emergency Medicine) Meeting in 2009 and 2010. This meeting is the number one worldwide for ICU professionals and underlines the multi-disciplinary activity of EAMS.

Moreover an exchange of speakers for the annual meetings of EAMS, SAM and DAS forms an important link be-

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The editors gratefully acknowledge the use of photographs of Cheltenham DAS taken by S.Radhakrishna, UHCW, Coventry.

Please note that although the newsletter welcomes all contributions, the views expressed in articles are those of the authors and may not reflect the views of the Society

President's Report

As you read this newsletter we are in a New Year and let's hope that, in spite of the recessionary times, we all continue to be optimistic about what we can achieve in 2011 !

One of last year's highlights was the Cheltenham DAS meeting . This was a fantastic meeting with the largest number of attendees ever at a DAS meeting (around 550) and record number of abstracts and poster presentations by our trainees. It also upheld the DAS meeting tradition of excellent quality of scientific presentations combined with an exceptional social programme. One of the highlights yet again was the SAM lecture, and this year's, given by Professor Maya Suresh was excellent. Our exchange with SAM, USA is mutually beneficial and we hope to forge further links with the European group (EAMS) and the Australians through their Airway Special Interest Group. The meeting venue, Cheltenham Racecourse, was an inspired choice as was the dinner venue, the elegant Pumphouse where we danced the night away. We honoured two special DAS members by presenting them with the Macewen DAS silver medal at the dinner. Sir William Macewen, a Scottish surgeon, was celebrated for the first elective orotracheal intubation for anaesthesia in 1878. The first worthy recipient was Dr Adrian Pearce in 2009 and at Cheltenham Drs Ralph Vaughan and John Henderson were awarded the Macewen DAS silver medal. Ralph was a founder member of our society, and it's first Chairman. Due to

his involvement in the college and the AAGBI and his enthusiasm for developing airway management Ralph gave DAS great credibility from the outset. More importantly high standards in airway management were always one of Ralph's passions and set us on the right path. The second recipient this year, John Henderson was also a founder member and secretary. Among his many contributions to the society he will be especially remembered as first author of the DAS guidelines on unanticipated difficult intubation which took almost four years of hard work to get to publication. It is still the most cited paper in *Anaesthesia*! It was indeed an honour to present these two stalwarts of our society with their Macewen DAS medals.

I would like to thank the hard-working team who organised such a wonderful meeting. Their leader, Richard Vanner, deserves a special vote of thanks. Running such an event involves a lot of effort and the resounding success of the meeting is a testament to their dedication.

As we look ahead to 2011 it is an exciting vista! We have a number of excellent projects coming to fruition including NAP 4 and the Extubation Guidelines.

At the Cheltenham meeting Nick Woodall whetted our appetites by presenting some preliminary results from the NAP 4 study. The official Launch takes place in London on 30th March at the Royal College of Anaesthetists. This project has been enormous and will contribute so much to our understanding of why and how things go wrong in airway management. This is our core business. Results of this audit will help direct the path DAS will take to improve standards in airway management in the future. Our sincere thanks and gratitude go to two people who have already dedicated so much of their time to this project, Tim Cook and Nick Woodall. To them and to all them members of the NAP 4 Review Panel, we are indebted.

Advancing our aims through good research is one of our priorities. Good news in this regard came from the recent December NIAA meeting where a DAS project was successful. The grant went to the team at Aintree Hospital Liverpool and their ADAM project. I would like to personally congratulate Peter Charters and Peter Groom on this achievement. DAS can be proud as some other specialist societies failed to award a grant.

Another small project –the DAS iPhone App- the iDAS, containing the Difficult Airway Algorithms, is now available for downloading. It will be available on other platforms in the future. Do please feed back comments to the editors.

Lastly our charitable overseas activity continues. We are running an Airway Workshop in Kampala in the spring and supporting a Ugandan doctor to train in anaesthesia over three years.

As I have intimated we have many exciting projects and activities in progress. As the largest specialist anaesthesia society in the UK now we feel we are well positioned to progress our activities on your behalf. This is only possible because of the hard work of our committee -all of whom I would like to thank.

Ellen O'Sullivan
DAS President

atric and neonatal surgical population.

Dr Haemaeker's team (also DAS regulars) also won for their work on emergency transtracheal ventilation using EVA, Expiratory Ventilatory Assistance.

Day two started at 0745 with the "Maintaining oxygenation" session. "An Oxylator" Dr Ducanto (Milwaukee) told us: is a gas powered ventilator no bigger than a drinks can that has promising applications in mass casualty events and patient transfer. Dr Christodoulou (Winnipeg) gave an insight into how to maintain oxygenation during critical phases of airway management, such as induction, using the principle of "apnoeic diffusion of oxygen", a "bridge to intubation", as he called it. Dr Armistead (Philadelphia) followed with her talk on the development of ECMO, showing us a video made by a London teenager who had survived with ECMO.

Then my DAS Lecture, Patients, Principles, Paradigms, a philosophical look at airway management over the years. I sought to explain why airway societies and guidelines have only developed 15 years ago, despite anaesthesia's existence for more than 160 years.

The annual Ovassapian Lecture was given by Prof Michael Todd on Cervical Spine Mechanics, Instability and Airway Management. Then Prof Fushan Xue (Beijing) spoke on lightwand-guided intubation in children with difficult airways: an under-used technique, I think.

The afternoon dealt with Airway Control in Austere Environments. Dr Timmerman spoke on prehospital management, Drs Aghababian and Yarzebski (Massachusetts) on the challenges of the Emergency Room while Dr Mort spoke on airway problems in ICU.

Day Three gave us talks on "Live and learn; unique challenges". Dr Rosenblatt (Yale) gave an overview from the SAM Discussion Forum, an on-line source of clinical support and advice. Irene Osborn (New York) described her team's anaesthetic experience in a field hospital in Haiti following the earthquake, closing with talks from Professor Cooper and Dr John Doyle telling us how they got out of their most difficult airway situations.

The final session was about recent important papers, with Barry McGuire on supraglottic devices, Prof Carin Hagberg on videolaryngoscopes and Dr Jalil Riazi (California) on the paediatric airway. Poster presentations? Lots, 75 in total.

SAM held their "get to know you" meeting midway up America's tallest (110 storey) building. Chicago lay before us, millions of lights, spread up against the dark east of Lake Michigan. A short commemoration was held for Dr Ovassapian, who died attending Euroanaesthesia last year. He was, and remains, a driving force in airway management in the United States and beyond. He is greatly missed.

Quotes of the meeting were John Doyle's *On videolaryngoscopy*: "the cleaner in the room can get a view" and
"education is not doing stupid things."

From our Foreign Correspondents

David Ball from Dumfries, and the secretary of Organising Committee for DAS 2009 went to SAM as the DAS Lecturer. He reports on the experience below.

DAS has always had good relations with the Society for Airway Management (SAM) including a reciprocal lecturing arrangement. This year, I was that DAS Lecturer. In addition, Barry McGuire, Chair of DAS Perth was also speaking. This meeting was held at the imposing 50 floor Swissotel, in America's big and bustling second city, Chicago.

How should I compare the SAM meeting to DAS? One answer: "the same but different". It's similar in that it has a mix of workshops, lectures, posters, presentations and exhibits held over three days.

What's different? SAM Lectures start earlier, so it's not unusual to see delegates bringing their breakfast into the lecture hall. Expert discussion groups feature more here, a total of twelve were on offer over two sessions. Workshops are big, spread over 20 stations, with participants free to move to any station at any time. Commercial disclosure is an important issue here, with every lecturer's second slide listing any competing interests and these are included again in the Course Program. There is no printed manual, but the lectures and abstracts are supplied on a CD-ROM.

Lectures? Lots. It was a wide- ranging programme. Day One started with "Airway training" with talks by Prof El-Ganzouri (Chicago) on starting a teaching course in Egypt, Dr Berkow on how changes in their approach to emergency airway provision had reduced cricothyroidotomy rescue rate, Dr Randel on their comprehensive training program at Northwestern University and Dr Doyle on incorporating fibreoptic skills into your own practice.

The next session was devoted to "New modalities in airway assessment". Dr Sweitzer (Chicago) told us "What's new in preoperative assessment of the adult airway", Michael Kristensen reprised his talk from Perth on Ultrasound and the Airway and Prof Behringer (Los Angeles) spoke about airway evaluation before extubation - "what goes in shouldn't necessarily come out".

Oral presentations? Two SAM grant recipients reported. Dr David Cattano (Houston) described his work on LMA cuff inflation with saline and Dr Corina Lee (as an Airway Fellow at Toronto, but really from Dundee) gave her report about forces exerted by the Glidescope during laryngoscopy. In the free-paper competition. Dr Simon Whyte won for his team's systematic clinical assessment of the Intubating Laryngeal Airway (the I- Q) in a paedi-

DAS Membership– An Appeal

The Difficult Airway Society is an ever evolving organisation, but to keep you involved and informed with the Society's activities you must

a) Pay your Annual Subscription

b) Provide us with your up-to-date details

Recently, the Society has moved to an entirely Direct Debit based system to collect Annual Subscriptions. Unfortunately several people still pay by Standing Order. Regrettably, DAS has had to take the decision that with the increase in subscriptions occurring in 2011 it would be unfair to run a two tier membership system, and for those still attempting to pay by standing order, their membership will lapse with the collection of 2011 subscriptions. Don't let this be your last DAS Newsletter!

Similarly, many will have been members since the beginnings of the Society and whilst much has changed in the world of Airway Management, we fear that some of you have forgotten to update your details. Is your email address really the same now as it was in 1997?

Thankfully, all is not as bad as it might first appear. The Specialist Societies Manager of the AAGBI Busola Adesanya-Yusuf dedicates a remarkable proportion of her working life to the Society and she will happily update your contact details and furnish you the change-over forms from standing order to DD. In the year that NAP 4 reports, please don't leave the Society because of incomplete paperwork!

Contact Busola

DIRECT Debit

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Peter Groom
DAS Treasurer

&

Atul Kapila
DAS Secretary

Reporting Cheltenham

Our 15th Annual Scientific Meeting was held in the magnificent surroundings of Cheltenham Racecourse, where a fantastic programme was organised under the able leadership of Richard Vanner.

On day one 108 delegates rotated through six workshop stations presented in the corporate boxes overlooking the racecourse. Mike Copp and Chris Mather put a lot of work into the overall coordination of the day and were rewarded with universally good feedback from the delegates. Sessions structured around the successful local Difficult Airway Rescue Techniques Course (DART) were complemented by two simulation workshops which were the undoubted highlight of the day. Based on the Human Factors Airway Rescue Team Training Course (HAT), which has been developed at the Bristol Medical Simulation Centre, these saw delegates managing a dislodged tracheal tube in a prone patient and then engaging in a detailed debrief. Jo Cornes, Lucy Miller and their team took the doors off the rooms to install a fully functional anaesthetic machine, and dressed in theatre scrubs they created a very realistic environment.

It was standing room only for the first session of the scientific programme. Mike Saunders, a consultant ENT surgeon from the Bristol Children's Hospital began proceedings with a discussion of some of the airway challenges faced in a tertiary referral centre, including children requiring intubation while still in the birth canal. Professor Jean-Louis Bourgain from Paris followed and recounted his considerable experience of trans-tracheal ventilation in patients with head and neck cancer. Lastly David Lockey argued persuasively that surgical cricothyrotomy was superior to needle techniques in emergency airway management. He pointed out that the majority of the ballpoint pens available from the trade stands were unsuitable to be used in an improvised tracheostomy; it is surely only a matter of time before an enterprising marketing department puts this right.

A 'minor' fault with the heating had the temperature dropping rapidly as the second session began, but this did not deter delegates attending a fascinating set of talks about litigation and the airway. Tim Cook presented some of his recent work based on data provided by the NHS Litigation Authority and showed amongst other things that 70% of the doctors prosecuted for manslaughter over the last few years were anaesthetists. With minds duly focused, we were treated to a master class in how to not get sued from David Bogod. His clear presentation made it apparent that the majority of airway disasters happen in easy airways that are managed badly, rather than in difficult airways per se. Jo Lloyd, a lawyer and medical litigation expert then closed the session with an overview of how to best pre-

Otolaryngologists in an outpatient setting has replaced indirect laryngoscopy. The patient sits facing the operator, and after preparation with a water based gel or local anaesthetic decongestant, a short narrow (3-4mm) fibrescope is passed through the nose allowing a direct view of the larynx, oropharynx, and perilaryngeal structures. This allows examination of the larynx both at rest and during phonation, as well as an assessment of the perilaryngeal structures, and glimpses of the proximal trachea. The normality of the larynx can be established, and additional information obtained allowing better planning for airway management. Although in suspected airway cancer cases this (or CT scan) will already have been performed, in other cases these two simple tests will provide more information than the standard bedside ones.

Neither test is uncomfortable nor dangerous if performed correctly (although nasendoscopy in acute paediatric settings is a matter of debate). They are cheap, quick, and provide more information than plain X-Rays. In the absence of ready availability of flow volume loops, I urge all DAS members of to adopt these tests as a second line.

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4. Tousignant G, Kleinman S. *CJA.* 1992; **39 :** 286 -9 Functional stridor diagnosed by the anaesthetist.
5. Schwartz R, Stayer S, Pasquariello C. *CJA.* 1993; **40:** 1049-52. Tracheal tube leak test – is there inter-observer agreement?

In My Opinion

In this edition comes from James Palmer in Manchester

Beyond Mallampati; additional bedside airway tests.

Before 1980, airway assessment was based on experience not objective tests. By 1990, the modified Mallampati (Samsoon & Young) test was universal, and Thyromental (TMD) or Sternomental (Savva) distance (SMD), the Delikan test, and interincisor gap (IIG) assessments were in use. In the 1990s, Calder's jaw protrusion test was added, and by 2001, preoperative recording of these tests was standard. The effect these had on reductions in unexpectedly encountered difficult airways is unknown. The contribution made by specialist equipment or structured skills training is equally unquantifiable. What is certain is that unexpectedly difficult airways still occur, as does patient damage caused by airway management- the NAP 4 audit completed at the end of August 2009 recorded about 180 patients in the UK who either sustained an injury or were admitted to ITU (personal communication, Tim Cook).

Current bedside tests are limited because they only assess four factors:

1. Temporo-mandibular joint (TMJ) hinge movement: Mallampati score, Interinscisor gap.
2. TMJ sliding movement: Calder score
3. Atlantoaxial extension and mobility: Delikan test, SMD, TMD
4. Assessment of submental volume or space; SMD, TMD

There is no assessment of internal structure or function of the larynx so this is my plea to DAS Members to consider two other bedside tests. One requires nothing more than the application of common sense and a pocket device, the other needs additional skills, but these are easily learned and applicable to the bedside.

Laryngeal auscultation:

In normal subjects vesicular breath sounds are not transmitted laryngeal sounds [1.], listening to one's own larynx harsh sounds are heard that are characteristically sharply defined. If stridor is clearly audible it merely appears louder through the stethoscope, but subtle stridor, almost inaudible because the obstruction is either slight or very severe, becomes clear and obvious. Stridor may be misdiagnosed; in the author's city in the past 18 months, at least four patients have been diagnosed with asthma or COPD, when they had obstructing laryngeal or subglottic lesions.

Although this technique has been used to assess stridor in children and swallowing in neonates [2, 3.], and has been used to diagnose functional stridor in adults [4.], it has not been described in anaesthesia except to assess tube leaks [5.].

Assessment of the patient's voice must be made too; if the voice is of normal calibre, timbre, strength, and volume, it is very unlikely for there to be an abnormal larynx; an unhealthy larynx cannot produce entirely normal speech.

Flexible Nasendoscopy:

This standard technique employed by

sent yourself in court if things do go wrong. Tim Cook took the stage again and they mounted a cross-examination illustrating how to ensure that your version of events gets a fair hearing.

The free paper session after lunch featured some excellent presentations on topics ranging from cricoid pressure training to the minimum size of orifice that would admit various supraglottic airway devices. Jonathan Mayer was the deserved winner describing the effects of infrequent jet ventilation in sheep with airway obstruction.

Oral Presentation Winners with the President, Richard Vanner (LOC Chair) and David Gabbott (abstract Co-ordinator)

The final session of the day started with Professor Maya Suresh, Vice President of SAM, who gave a detailed talk on airway catastrophes in obstetrics highlighting the fascinating differences in practice between the US and UK. She was followed by Jaideep Pandit who gave an overview of the exciting developments in airway research made possible by the partnership of DAS with the NIAA and NIHR. He also discussed the ADEPT project which promises to help sort out the confusion of new airway devices coming onto the market by creating a new professional standard.

Delegates attending the dinner on Thursday night at the magnificent Pittville Pump Room were entertained with excellent food and wine enhanced by the presence of Opera Interludes, whose renditions of famous arias perfectly matched the grandeur of the surroundings. The evening was very well organised by Sarah Bakewell and the after-dinner dancing was still continuing when your correspondent made his way home, well past his bedtime.

Proceedings recommenced bright and early the next morning amidst the descending winter weather. Thankfully the conference hall had now warmed up and delegates were treated to a session on education and the airway. Nick Wharton talked about the success of the Severn Airway Training Society, a group of local trainees who have developed a very successful programme of airway training, which is now being adopted outside the Bristol region. Corina Lee spoke about her experiences as the inaugural airway fellow at Toronto General Hospital, and offered some helpful advice for others hoping to set up a similar programme elsewhere. Finally Richard Vanner, Fiona Kelly and Tim Cook (again!) discussed an important recent case of death during airway manage-

ment. Their presentation discussed various learning points around the use of the iLMA and airway exchange catheters, and sensitively analysed what went wrong in this case from a human factors viewpoint.

The penultimate session started with a plug by Andy Norris for DAS 2011 in Nottingham, where they are already working hard to lay on an excellent conference. He was followed by Chris Acott who spoke about "Everything Airway", a new airway conference to be held in Adelaide next year. Nick Woodall then took over to talk about NAP 4. He gave a fascinating insight into the process of coordinating such a large project and provided some previews of the final results. Almost 115000 cases were recorded during the census phase of the project, allowing the investigators to estimate that the number of anaesthetics being given annually in the NHS approaches 2.9 million, a huge figure. The study's estimated rate of serious complications due to airway management is to in the region of 1:22000, although this may well be an underestimate. Tim Cook spoke briefly about some of the follow-up work that is being done to investigate the human factors associated with airway management. Brendan McGrath then spoke about the important work he has been doing with the National Tracheostomy Safety Project designed to improve tracheostomy care across the country.

The final session of the conference centred around the use of sugammadex. David Levy set out the many serious side effects of suxamethonium and gave a clear explanation of how to use rocuronium in rapid sequence induction. Chris Frerk then demonstrated the use of sugammadex as a rescue drug through the use of real-life case studies, and demonstrated that as good as sugammadex is, it will never be the answer for everything. To finish, Andrew McLeod gave an impassioned lecture on the benefits of muscle relaxation in the difficult airway, drawing heavily on the work of Ian Calder to dismiss the canard that one must always check that bag/valve/mask ventilation is possible prior to administering a muscle relaxant. Finally, with the snow coming down and many people facing long journeys home, the meeting came to an end.

Poster Prize Winners

DAS Cheltenham 2010 was a great success, with record attendance and universally good feedback from the delegates, thanks to hard work of the local organising committee. We look forward to seeing you all next year in Nottingham.

Dan Freshwater-Turner

Where do you see the DAS in 10 years from now/
how do you see the future of airway management evolving?

It seems to me that the Simulation should be involved. Pilots have to visit a simulator centre and are faced with various difficulties. One suggestion therefore is that the DAS should look at all anaesthetists attending a difficult airway day every one or two years as part of their revalidation

Clinical research is becoming more difficult due to ethical constraints.
Looking to the future DAS will have to engage in innovative thinking and mannequin development.

Increased use of RILs should reduce inappropriate use of Supraglottic Airway Devices (SADs). Improved management of extubation is important. Glottic obstruction during use of SADs is an important problem and improved measurement of such obstruction will make use of SADs safer.

I acted as the Honorary Secretary to Junior Anaesthetic Group, the Society of Anaesthetists of Wales and the Association of Anaesthetists of Great Britain and Ireland. I was also elected as Vice - President of the Royal College of Anaesthetists and President of the Welsh Society. I was the cofounder [with Adrian Pearce] and first Chairman of the DAS.

scopes and this was the basis of "videolaryngoscopes".
My most important publications are those on straight laryngoscopy, the DAS guidelines and various chapters in textbooks, including Miller edition 7. I served as DAS Secretary and as Secretary then President of the European Airway Management Society.

What is the biggest change in anaesthetic practice of your career?

The advent of structured training in our specialty. Before this came about, training was just about secondary to everything else. Both the College and the Association played significant parts in the developments.

The ability to convert dangerous "blind" techniques to safer visual ones. Ultrasound has made central venous cannulation safer. In airway management improved laryngoscopes and use of fibreoptic and other technology has improved safety. There is no place for blind airway techniques in modern practice.

What is the best thing to happen in airway management during your lifetime?

Without doubt the L M A. This apparatus saved many lives worldwide and remains within the bedrock of our specialty. I believe that Archie Brain should have been knighted and it is a great disappointed that this has not happened.

The ability to achieve tracheal intubation under vision in virtually all patients. However the range of equipment and skills needed to achieve such intubation has not been sufficiently supported by the College.

Would you (or how would you) change training in airway management?

I think that the use of mannequins will continue to increase and each department should have a mannequin room. There should be a lead consultant and all anaesthetists should be 'put through their paces' at least once a month with the mannequins set to simulate airway difficulties.

The College must ensure that all anaesthetists have a greater range of airway skills than in the case at present. Suitably interested anaesthetists should be given the responsibility and time in every hospital. NHS management must ensure that such training takes place. Documentation of airway assessment (particularly interdental distance and jaw protrusion) of all patients should be mandatory.

This year's AGM

Was held on Thursday 25th November 2010 at the end of the first day's sessions of the Annual Scientific Meeting. The DAS faithful were there in force. The DAS Chairman Ellen O'Sullivan then presented her report. The AGM decided that the role will with immediate effect be that of DAS President in keeping with the majority of other anaesthetic specialist societies. The DAS Treasurer Peter Groom and the DAS Secretary - Me! also presented reports
Details of ADEPT and the finances of the Society are covered in other sections of the newsletter and so are not reported here.

Communication with the membership and involving them with the Society's activities as a whole were key issues. To this end, it was decided to move the AGM next year to earlier in the day to encourage more participation. We plan to incorporate all the DAS project activity related presentations, SAM speaker and AGM into a Thursday afternoon session in future.

The revamping of the DAS newsletter under the editorial control of Alistair McNarry and Ravi Bhagrath and DAS website by Jairaj Rangasami should further improve communication with our members and with the formation of an airway equipment manufacturers section provide a valuable resource for inquiries about airway equipment.

The creation of the iDAS app for the iPhone will allow instant access to the DAS guidelines. The app will also become available for other platforms in due course.

DAS is continuing to develop relations with organisations here and abroad, with plans for overseas airway workshops in Uganda and sponsorship of a recruit to the MMed program there.

This years recipients of the DAS McEwen medal are Ralph Vaughan and John Henderson. The presentations were made at the DAS dinner.

Sadly, we heard that the 40% national reduction in Discretionary Awards in the last round may be hitting anaesthetists harder than some other specialties. DAS is recognised by the ACCEA and will continue to invite and support members applications.

The Treasurer's report may not be of interest to everyone, but his figures so convinced those present that his proposed increase in the Society membership fee from £10 to £25 was carried unanimously. *(Peter Groom explains all on page 11)*

The call for a DAS Survey Officer was made. The role has been created to cope with the increasing requests for sending surveys to DAS members and provides an opportunity to have some input into survey quality, ensuring results are collected and analysed correctly and to encourage dissemination of the results at DAS meetings and for publication. Imran Ahmed from London and Elise Richards from Banbury applied jointly and now they begin their task in earnest!

Finally, my term as DAS Secretary came to its end and in the absence of hordes of rivals I was re-elected for a further term.

From your Honorary Secretary

Atul Kapila

Prize winners at Cheltenham– *See their pictures- pages 7&8*

Oral Presentations: (all orally presented abstracts will be published in *Anaesthesia*)

1st J Mayer, A Heard, J Dinsmore. Initial data from single jet rescue oxygenation via cricothyroid cannulae in critically hypoxic sheep. Royal Perth Hospital, Australia and Poole Hospital NHS Foundation Trust, UK.

2nd K Wild, N Woodall. A bench test for determining the minimum access requirements for the insertion of four supraglottic airway devices currently available in the UK. Norfolk and Norwich University Hospital

3rd M Leemans, I Calder. Is 'The Saturday Night Fever' stance worth the effort during flexible fibreoptic tracheal intubation. National Hospital for Neurology and Neurosurgery, London.

Poster Winners: (we aim to reprint these in the newsletter when space allows.)

Science/ Research. R McCahon, S McClelland, J Hardman, A Norris. Utility of the Airtraq laryngoscope in a cadaveric trauma model. Queen's Medical Centre Nottingham.

Audit/ Surveys. K Place, P Walsh. Extubation of the Trachea, an observational audit. John Radcliffe Hospital, Oxford, York Hospital NHS Foundation Trust, York.

Case Report. N Patel, C Stewart, R Jeeji. Percutaneous trans-tracheal jet ventilation to aid inhalational induction and management of severe upper airway obstruction. City General Hospital, Stoke-on-Trent.

Write for DAS

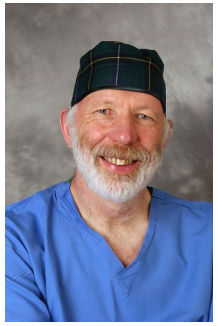
If you're a trainee and have been to an anaesthetic meeting with airway-related lectures, presentations or workshops please write in with a review.. We'd like from you a brief summary of the meeting and why we should *or shouldn't* spread the word. **newsletter@das.com.uk**

Macewen Medal 2010

The Society awards the Macewen Medal to those members who have made an outstanding contribution. This year Medals were awarded to John Henderson and Ralph Vaughan. Their citations are available on the website but the Newsletter caught up with them for more details in Cheltenham

Ralph Vaughan

John Henderson



Please can you summarise your career in a paragraph?

I qualified in 1966 from the Middlesex Hospital in London. After my house jobs I fell into anaesthesia by chance. I had intended to become a GP in Wales but the challenge of anaesthesia was too great. I became an SHO in South East Essex. I was very fortunate to be taught by many excellent teachers including the legendary J Alfred Lee. Thereafter I was appointed as a registrar in Cardiff in 1969. I was greatly influenced by the department and fell under the wing of Professors Mushin, Mapleson and Rosen. What a combination! I was appointed as a consultant in 1972 and one of my lists involved patients suffering with severe Rheumatoid Arthritis. This kindled my career long interest in Airway Management. There followed many papers, chapters, and lectures both at home and worldwide. The culmination was as Co-editor of our book entitled Difficulties in Tracheal Intubation.

I was interested in anaesthesia during an externship in Kansas City in 1966 and as a surgical JHO I found the ITU anaesthetists most helpful in looking after my sickest patients (surgical trainees were of little help). Anaesthesia's blend of practical work with a scientific basis appealed. However, I soon discovered that there was little scientific basis for airway management. A letter in *Anaesthesia* in 1993 started me on the route to the discovery that the Macintosh technique is inferior to the straight laryngoscope. I started the flexible fibreoptic service in the Peter Bent Brigham Hospital in Boston in 1977 and remain convinced that its a core skill. A lecture on rescue techniques at the NYPGA in 1978 increased my interest in that area and I have long believed that these too should be core skills. Seeing the Bullard laryngoscope at US workshops in the early 90s convinced me of the value of Rigid Indirect Laryngo-

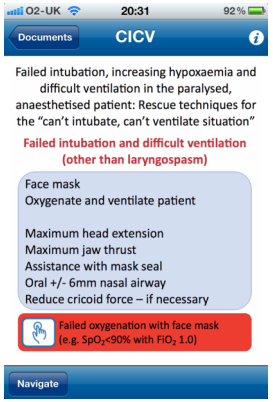
DAS Intavent Direct Developing Nations Scholarship 2011

Aimed primarily at abstract submitters from developing nations, The DAS Intavent Direct Developing Nations Scholarship will fund the winners attendance at the DAS Annual Scientific Meeting, this year in East Midlands. Preference will be given to those who have submitted an abstract to the meeting, but in the absence of an application from an abstract author other applications will be considered. HELP is available with abstract preparation and any potential applicants are advised to email Alistair McNarry as soon as possible (newsletter@das.uk.com) and certainly by 30th June 2011. Please note your abstract does not need to be finished by this time

INTAVENT | DIRECT

Introducing iDAS

The DAS guidelines for failed intubation are now available as an app on the iPhone. All the guidelines are there as well an airway alert section, news and the ability to complete a survey. It's free to download from the app store and will be available on other mobile operating systems shortly– we will let you know when that happens.



Increasing Subscriptions?

The treasurer explains

Current situation

Since the Difficult Airway Society's birth in 1997 there has been no increase in members' £10 subscription fee. Adrian Pearce et al could not have envisaged that their baby would grow up to become the UK's largest specialist anaesthetic society, recognised worldwide as *the* UK organisation defining standards in airway management. Having formulated successful guidelines for the unanticipated difficult airway DAS moved on to fund working parties concerned with extubation, paediatric intubation and the anticipated difficult airway. DAS also part funded (with the Royal College of Anaesthetists) the NAP 4 audit and 2 studies; forces exerted during laryngoscopy study and a videolaryngoscopy study.

Over the last 13 years the DAS has accrued cash reserves in excess of £140k through the success of our Annual Scientific meetings (ASM). Unintentionally, the main driving force of DAS spending has become the financial success of the annual scientific meeting. Local Organising Committees are requesting bigger and bigger loans to book venues and engage professional conference organisers. These loans are not repaid for between 18 months and 3 years and severely limit DAS's ability to support other ventures.

DAS's future aspirations

The current DAS committee would like to see the society begin to annually disperse a proportion of its considerable assets to fund new projects. Such a move would be consistent with the society's status as a registered charity and future aspirations currently include:

1. Continuation and completion of current projects
2. An expanded, more frequent newsletter.
   (3 issues per year at circa £1,500 per issue, £4,500 per annum).
3. A root and branch update of the DAS website.
4. iPhone app; the iDAS, containing the difficult airway algorithms.
   (£7,000 plus £1,200 annual running costs).
5. Directly support original research with an initial £10,000 annual donation to the National Institute of Academic Anaesthesia (NIAA) increasing to £20,000 and to be reviewed yearly.
6. Coordinating and funding (with industry) the Airway Device Evaluation Project: 'ADEPT', facilitating the grass roots assessment of new airway devices. This would be a paradigm shift for DAS, transforming it into a national research network similar to Cancer Research UK.

7. Increase financial support for the 3rd world by funding a Ugandan junior doctor to train and qualify as an anaesthetist (Medical Masters degree) £3k per annum for 3 years.
8. Fund continuing DAS exchange visits with USA (when current sponsorship ceases) and forge new links with both the European and Australian Societies of Anaesthetists.

The Problem

The society's only guaranteed revenue stream, members' subscriptions; provide income of £18k virtually covering our annual running costs. Loans to Local Organising Committees prevent us from increasing our annual charitable expenditure because accountants stipulate we must maintain a cash reserve of £100K to cover our liabilities (the cost of two scientific meetings failing).

The Solution

It is plain that we cannot prudently increase our expenditure without first increasing our income. The Society cannot expect its ASM to always make a profit (although this has been the case to date, profit varies considerably from year to year).
So we have decided to increase our revenue from several sources. These can be expected to at *least* double our current income.

New Revenue Streams

1. Increase members' subscriptions to £25.
2. Begin charging our Euro Zone colleagues £25 via PayPal (all non-UK members currently receive free membership)
3. Manufacturers to be charged £100 per annum to list each of their products on the DAS Website equipment directory page- (this could give a considerable income)
4. Accept a single advertising subscription for newsletter from Industry at £350 per advert
5. Accept a limited number of half-page adverts for local airway management courses at £100 each

Benefits to members

For the last 13 years fees have remained static and we have achieved a great deal but to continue to evolve and achieve even more in the face of our considerable conference loans and liabilities we must increase revenue. The increased membership subscriptions are only modest. We remain the cheapest specialist society and members would receive more from the society as outlined above.

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DAS Projects-*update*

ADAM Website

DAS made £4000 available to the fund to develop the website. (This is currently also funded by money from running the airway courses at Aintree). Thus far £1000 of this has been used to answer points made about the design of the website.

The main points for user concern -

Clarity for clinical problems descriptions. Nomenclature in medicine is becoming more of an issue over time and Dr Charters has been involved with Dr Andrew Morton of SCATA to ensure that the rational of what is being applied elsewhere is adhered to. This is a particularly important when it comes to translations into other languages.

Surgical tracheostomy. This was deliberately omitted in the preliminary version but will be added to improve the management issues in airway trauma.

Limiting choices of devices. Some users wanted fewer device choices to presentation of information irrelevant to them (e.g. no experience of it or their hospital would never get it). Others thought it might help make a case for getting new gear.

Updating indirect laryngoscopy (IDL) ratings. At the time of the initial device rating, IDLs were relatively new and experience since means that these ratings need to be updated.

No provision for "bedside test" assessments. The initial design only catered for abnormal clinical problems associated with a particular condition and ignored simple bedside tests which left the clinician deciding, for example, whether being edentulous negated any of the issues highlighted.

Clearer help for those who have not been on ADAM courses. Ideally anyone using ADAM should have been on a course to be taught the system individually. Particularly for non-UK users this is a problem and the user interface will be upgraded to address this issue.

The next update of the website due early in the New Year will alter the way the clinical problems are presented, include surgical tracheostomy as an alternative device and allow users to include or exclude devices as they choose.

A blog, run in parallel to the website, will also be available for user groups and feedback to the organisers. Dr Seema Darshane is our local expert on IDLs and should be contacted if you wish to be involved in reviewing the IDL ratings.

The "bedside tests" issue is being addressed by a new initiative called the PREDICTOR. Funding has been applied for from the NIAA awards and a new airway research fellow (Dr Andrew MacDonald) appointed to head the initiative on the medical side. The funding is to allow post-graduates in computer sciences (at Imperial College) to develop a machine learning system to respond to input from clinicians. The idea is for you to input your bedside tests to the Predictor and it tells you what it anticipates will be the view at laryngoscopy. Because the system is built to learn from experience, the more cases submitted the more accurate it will become over time. We hope that as many people as possible will report their assessments and feedback as to what actually happened at laryngoscopy.
PG

DAS Guidance on selecting airway-related equipment

***All* airway-related equipment under consideration must fulfil the minimum criterion that there exists for it at least one source of 'Level 3b' trial evidence concerning its use, published in peer-reviewed scientific literature**.

A literature review will determine whether such evidence exists, or it might be provided by the company marketing the device. 'Level 3b' refers to the quality of evidence, in the hierarchy of evidence suggested by the Centre for Evidence-Based Medicine (CEBM), from a trial (not necessarily randomised) with a control arm (which can be a historical control). The Level 3b criterion recommended by DAS is therefore a *necessary*, but not of itself *sufficient*, criterion by which to select a device for purchase. Therefore, when presented with a choice of several devices each of which fulfils the Level 3b criterion, the local Medical Devices Management Group will need additionally to consider other types of evidence when making its final choice or recommendation.

Organisations such as the Centre for Evidence-based Purchasing (CEP, which was part of the NHS Purchasing and Supply Agency) and Emergency Care Research Institute (a US-based organisation) publish reports on various categories of equipment. For up-to-date information, purchasers should contact and visit other users, trade exhibitors and sometimes factories. In particular, previous performance by the manufacturer in terms of delivery, stock held, training provided and response to problems are rarely published, but details could be obtained from users in other Trusts. While none of this data reaches the minimum level of 3b evidence which DAS recommends all devices must meet, it is helpful (along with other published studies) in helping to choose between devices for which Level 3b evidence does exist.

The local Medical Devices Management Group, including the anaesthetic equipment officer, should then carefully consider the options from the information available. Once a choice is made, a local trial should be carried out on the selected equipment by users simply to ensure that it meets local needs, that it fits well into the local environment (eg, in terms of sterilisation services, storage, etc.) and that local users gain familiarity with it (if they have not already). As many users as possible should be encouraged to participate and to feedback to the equipment officer on an agreed form (such forms are often a compulsory part of the purchasing procedure). Note, however, that the local trial cannot be published without formal ethical approval and therefore cannot substitute the recommended Level 3b evidence referred to above.

DAS projects funded in 2010

£19,857.50 loan to the Local Organising Committee of the DAS 2011 conference

£10,000 loan to the Local Organising Committee of the DAS 2010 conference

£10,100 NAP4 (current total expenditure)

£10,000 awarded via NIAA to fund Factors Predicting Difficult Intubation Study

£8,200 DAS iPhone App

£4,500 DAS newsletter

£4,000 SMART / NOTECH course

£4,000 ADAM website development

£1,700 DAS guidelines committees

£1,000 ADEPT project

Total **£73,300.00**

and in 2011

- DAS 2012 Conference Loan
- Bursary for Ugandan doctor to train as an anaesthetist (£9,000 over 3 years)
- Newsletter
- DAS iPhone App
- ADEPT project
- DAS Guidelines Committees
- Update of DAS website
- NAP 4

and on and on....

DAS EAST MIDLANDS

2nd– 4th November 2011

www.das2011.co.uk

The DAS 2011 Meeting will be held in the easy to access East Midlands Conference Centre (www.nottinghamconferences.co.uk/emcc/).
The programme features airway trauma, physiology, recovery issues, and even a Gala Dinner in the City Council Chamber.
Book your Study Leave Now!

ADEPT

The Cheltenham Meeting saw ADEPT unveiled for the first time. Here JJ Pandit, the Society's Scientific Officer explains all..

New DAS Guidance on the selection of airway-related equipment

Faced with the concern that an increasing number of airway management devices were being introduced into clinical practice with little or no prior evidence of their clinical efficacy or safety, the Difficult Airway Society formed a working party (Airway Device Evaluation Project Team, ADEPT) to establish a process by which the airway-management community within the profession could widen the scope of formal device/equipment evaluation.

In a recent editorial, Wilkes et al. described the problems faced by purchasers of medical equipment when choosing from a large number of similar devices [1]. Published guidance from the Association of Anaesthetists of Great Britain and Ireland (AAGBI) [2] and the Medicines and Healthcare products Regulatory Agency (MHRA) [3] recommend that the purchase of equipment should be based on evidence of safety and performance. Wilkes et al. therefore suggested the establishment of a 'device evaluation centre' to coordinate assessments of medical devices used in anaesthesia to help provide evidence upon which purchasers could base their purchasing decisions. ADEPT has modified these suggestions and agreed on guidance now adopted by the Difficult Airway Society as a new professional standard to apply when selecting airway devices. This will be the first time that a professional body has coordinated such evaluations because in the past, such coordination has been carried out by government bodies and agencies.

This is stimulated by a growing concern within the profession that an increasing number of airway management devices are being introduced into clinical practice with insufficient meaningful evidence of their clinical efficacy or safety. The choice of whether or not to use or purchase an airway device should ideally be informed by the strength of supporting evidence. This leads us to consider some fundamental questions about the broader question of the nature of 'evidence'. Randomised controlled trials (RCTs) are considered the gold standard of evidence, but there are practical and intellectual limitations to RCTs, especially in the context of airway-related research. However, there are other valid study designs which can generate a *minimum* level of evidence needed to judge whether or not a device is clinically effective. This minimum level can be defined as being is at least one published case- or historical-controlled clinical trial (commonly termed 'Level 3b' in the standard hierarchies of evidence) [4]. This minimum level has now been formally adopted by the Difficult Airway Society as guidance on a professional standard.

All anaesthetists should henceforth ensure that all airway-related equipment they use or purchase is backed by at least one Level 3b trial.

Wide acceptance and application of this guidance should affect the behaviour of individual anaesthetists, industry and the Difficult Airway Society itself. In future articles in the scientific literature, on the DAS website and in this newsletter, we will explain the process. The Difficult Airway Society will work in partnership with individual anaesthetists and with industry, creating a national network, providing a robust platform by which airway devices can be evaluated to provide at least the minimum evidence base required.

1. Wilkes AR, Hodzovic I, Latto IP. Introducing new anaesthetic equipment into clinical practice. *Anaesthesia* 2008; **63**: 571–5.
2. Association of Anaesthetists of Great Britain and Ireland (AAGBI). *Safe Management of Anaesthetic Related Equipment*. London: AAGBI, 2009.
3. Medicines and Healthcare products Regulatory Agency (MHRA). *Managing medical devices (DB2006(05))*. London: MHRA, November, 2006
4. Centre for Evidence-Based Medicine at: http://www.cebm.net/index.aspx?o=1025

Members of ADEPT:
J. J. Pandit[1], M.T. Popat[2], T. M. Cook[3], A.R. Wilkes[4], P. Groom[5], H. Cooke[6], A. Kapila[7] and E. O'Sullivan[8]

[1] Consultant Anaesthetist, Nuffield Department of Anaesthetics, John Radcliffe Hospital; Senior Lecturer, Nuffield Department of Clinical Neuroscience, University of Oxford; Fellow of St John's College, Oxford, UK
[2] Consultant Anaesthetist, Nuffield Department of Anaesthetics, John Radcliffe Hospital, Oxford, UK
[3] Consultant Anaesthetist, Royal United Hospital, Combe Park, Bath, UK
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[5] Consultant Anaesthetist, University Hospital Aintree, Liverpool, UK
[6] Secretary, British Anaesthetic and Respiratory Equipment Manufacturers Association, Sugworth Lane, Radley, Oxon, UK
[7] Consultant Anaesthetist, Royal Berkshire NHS Foundation Trust, Reading, Berkshire, UK
[8] Consultant Anaesthetist, St James' Hospital, Dublin, Ireland

Website News

The website is undergoing a make-over. Here Jairaj Rangasami and Karthik Ponnusamy outline some of the changes.

1 The Equipment Manufacturers tab is live! The first advertisement of 4 items has been made by Karl Storz, and we are expecting more to follow shortly. [*interested manufacturers should contact Peter Groom, treasurer@das.uk.com to arrange listing–more detail on the site!*]

2 The meetings pages are being updated to show interesting information and pictures of past DAS annual meetings. This work will progress as quickly as we receive the information…

3 We are planning to allow membership and possibly payment to be arranged through the website. We are also in the process of updating the website appearance and architecture but all of this takes time.

Visit **www.das.uk.com** to follow the changes.