# Difficult Airway Society

## NEWSLETTER

*Pen of the inventor*

*Book review section*

*Ann Arbor experience*

*Macewan medal citations*


DAS-ASM 2014
Stratford-upon-Avon

www.das.uk.com

## SUMMER 2014

# EDITORIAL

The sunshine is back again!

The seagull (yes, in Birmingham more than 100 miles from the nearest beach!) that hangs around some where on top of our hospital is keeping me awake at the end of my fourth night shift. I am not sure, at least for now, if I should feel happy about the weather outside!

In this edition, we are bringing you the details of DAS Stratford-upon-Avon in Shakespeare's county. The highlight of the conference will be the cadaver workshop to be held at the 'state of the art' anatomy lab in Coventry, which I had the privilege to visit recently. All set for three days of brain storming, learning and entertainment!! The organisers are looking for some interesting cases to share and there are extra points for multi-centre projects in the poster competition (see the details inside)

DAS has always supported and recognised innovation. The Macewan medal is presented to the leading lights in our specialty who have made significant contributions that changed our practice. The two medal winners in 2013, Drs Cormack and Lehane need no introduction and we have included their citations in this edition. On the same note, we are starting a new series on innovations in the field of airway management named *'From the Pen of the Inventor'*. We will be bringing you some motivating stories from some of our contemporary innovators , who successfully launched their products. The first in this series is from Dr Nasir, the inventor of iGel® .We are sure their experience will stimulate at least a few younger colleagues to follow their dreams and make their ideas a reality.

We will now be including case reports, interesting clinical situations and snippets related to our field of practice in the newsletter. If you have anything interesting to share, please forward to us.

It is time to find some one to take over the very important job of keeping the DAS finances in order, and in the black! Our current treasurer Dr Peter Groom is stepping down after six years of exemplary work. He shares with us, what it has been like being the treasurer of the largest airway society in the world. If you are up for the challenge, please do apply.

If you would like to see a particular topic included in this newsletter, please feel free to contact us.

Have a great summer

**Sajay**

**M.Price** Cardiff
**A.Sajayan** Birmingham
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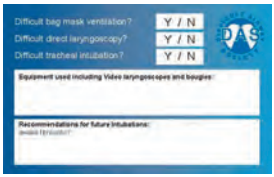
# PRESIDENT'S PAGE

Hope this finds you all in good cheer.

DAS has been receiving several requests and suggestions from its membership on setting up a database of difficult airway patients.
The DAS Committee have looked at this in great detail, taking into account patient confidentiality and data protection. The proposed DAS airway alert card (BLUE CARD) is shown here. Details of implementation will be communicated soon via e-mail and on the DAS website. Members are welcome to participate by giving their opinions and feedback once the details are published.


DAS and Society of Airway Management (SAM) enjoy a close relationship and have exchanged speakers at our annual meetings for several years. This was enabled by a generous sponsorship from a leading airway equipment manufacturer. Due to a company merger, this longstanding relationship has ceased for now. Currently we are each sponsoring our own guest speakers for our respective annual meetings. I am proud to be representing our Society at the SAM meeting, this September, in Seattle USA. There is still time to register for this meeting and I hope our Society can have a larger presence at the forthcoming SAM meeting.

It is the time of the year in our calendar for elections. Our DAS Treasurer, Peter Groom has served the Society in an exemplary manner for two terms. His replacement will be decided by electronic voting, successfully trialled in 2013 for the current Secretary and President positions. We will be having more details in the Newsletter and website about the electronic voting overseen by the Electoral Reform Services.

Enjoy the summer, a rare delight for our Isles.

Please book early for DAS 2014 at Stratford-upon-Avon. The local organising committee, led by Krish, has planned an unforgettable programme for us all.

**Jairaj Rangasami**
President DAS

# SECRETARY WRITES……..

There is something to summer that cheers the heart up and stimulates the mind. As I look around from my garden chair, at the glorious colours and the wild noisy visitors, I know that our gardening efforts at home since early January have paid off.

This success has a parallel to DAS where the Committee have continued to work with commitment and enthusiasm to take the aims of the Society forward.

A new DAS web page will greet you in the near future, being more colourful, functional and comprehensive than ever before. The Airway Leads (AWLs) have signed in to the DAS website and we now have the required security in place to share the database with the Royal College of Anaesthetists, to take the Airway Lead project forward. Very soon we intend communicating more effectively though our web pages to share new educational projects and to receive communication from the AWLs in return. This would be a great portal for developing high standards of airway management across the UK.

The DAS logo now is copy right protected and in the wake of this development we are now venturing into new territories, supporting educational courses in this country and abroad. This takes the form of a DAS committee evaluating courses and rewarding them with a mark of approval that they meet the high standards that DAS has always stood for.

DAS will continue to work with the Association of Anaesthetists of Great Britain and Ireland (AAGBI) to strengthen this educational partnership. To this end we jointly aim to run airway courses and develop educational initiatives for developing countries.

Dr.Ravi Dravid leads a team for establishing an airway revalidation courses which will help anaesthetists meet the revalidation requirements for updating their portfolios in a short simple way. The project is well on its way and should be launched by early next year.

As the DAS Secretary, I had the good fortune of attending the SRATI (Romanian Society of Anaesthesia and Intensive Care) at Sinaia, Romania, and was part of a very well run airway course organised by Dr.Daniela Godoroja. While the hospitality was relentless, the standards were exemplary.

There have been more educational courses and lectures by DAS experts within the UK and DAS has continued to support airway research through the National Institute of Academic Anaesthesia (NIAA).

There is perhaps more in our tumultuous DAS world of developments, that escapes me....but this glowing satisfaction should bear us all forward towards November to the DAS Annual Scientific Meeting at Stratford-upon-Avon. I look forward to seeing you all there.

Krish

# FROM THE TREASURER'S DESK

As I am approaching the end of my three year term as Treasurer I would like to publicise this fact and get members such as yourself interested in standing for the position when elections are announced later this year at the ASM. I have thoroughly enjoyed the role and am sure many others would too, but what does the DAS Treasurer actually do?

Voluntary organisations such as the Difficult Airway Society legally need a treasurer.

As treasurer I deal with all aspects of the Society's finances from record keeping and budgets to helping formulate funding strategies for its short, medium and long-term aims. As we are such a large society, DAS retains the services of the Association of Anaesthetists of Great Britain and Ireland (AAGBI) to deal with some very important aspects of its day-to-day finances such as collecting membership subscriptions. The AAGBI reports back to me on a regular basis just as I report back to the DAS committees on a three monthly basis and to our membership in person on an annual basis at the Annual Scientific Meeting.

In accordance with DAS's Constitution the roles and responsibilities the treasurer must:

- Keep accounts of all income and expenditure of the Society.
- Ensure the payment of all bills.
- Report to the Society on its financial state.
- Prepare a balance sheet and report for the Annual General Meeting.
- Complete an annual submission to the Charity Commissioners.
- Maintain a bank account in the name of the Society.
- Ensure that the account remains in positive balance.
- Not raise loans in the name of the Society.

But really what does this mean in practice; What does the DAS Treasurer actually do apart from raising members subs and pleading for everyone to swap over from standing order to direct debit? It's not just about signing cheques (although I do that a lot) and making trips to the bank. As treasurer, I am in the rather enviable position of overseeing all aspects of the Society's day to day running and long-term strategic thinking as well as liaising with our members, various sub-committees and industry. The day-to-day jobs of DAS Treasurer include all of the following:

**Keeping Everything in Perspective:** I need to know how much money there is and where it is. I ensure that the rest of the Committee know enough about our finances for it to make collective decisions about how much we can prudently spend and to work effectively within those limits. I also need to liaise with our accountant to prepare the annual Charity Commission return and accounts.

**Collecting Income:** This task is performed by the AAGBI, which collects our member's subscriptions and reports back to me on a quarterly basis. I have the responsibility of ensuring that DAS receives its share of Annual Scientific Meeting (ASM) profits as well as looking into ways of identifying new income streams; such as the equipment page on the DAS website or collecting subs from our overseas members.

**Financial Planning and Budgeting:** I prepare an annual budget and cash flow to present to both the DAS Committee and membership for approval. I need to keep a close check on our actual income and expenditure so that changes and adjustments can be made where necessary and cash flow problems identified well in advance. For example the Society's biggest threat is the cost of our ASM. Whilst DAS receives half of any profit made by an ASM it is wholly liable for any loss. We are limited in how we can distribute our assets because our accountants advise us that we must always retain a reserve of £100k to cover potential losses; severely restricting the size of our working capital. This constraint has been the main driver to recently increase our subscription charges.

**Record Keeping:** As treasurer I am one of two signatories on the DAS bank account. I keep a record of all cheques received and paid out, and all membership subscription payments. I ensure that money due to DAS is collected and that payments are promptly made when necessary. I issue receipts for money received and obtain receipts for money spent for my records, which are ultimately used to draw up the annual accounts and Charity Commission return.

The above may make the position of Treasurer sound complicated and daunting but in actual fact it's really enjoyable. As treasurer, I am one of the three elected committee members and sit for a three-year term. Ultimate financial responsibility lies with the Committee as a whole and not with the Treasurer alone should any problems arise.

**Dr. Peter Groom**

Outgoing DAS Treasurer

## *ELECTION OF DAS TREASURER*

*DAS invites nominations for the post of the Treasurer. Any full DAS member can stand for the election. Please send your personal statement with the name and signature of a nominator and a seconder both of whom should be full DAS members*

*Nominations will be open on 15th August and close on 30th August .*

*Voting will be between 15th September to 15th October organized by the Electoral Reforms Service and the winner will be announced on 14th November at the DAS-ASM at Stratford-upon-Avon*

## DR RONNIE CORMACK-MCEWAN MEDAL 2013 CITATION

Ronnie Cormack came from a crafting family tradition in Orkney, but Ronnie was born in 1930 in Rangoon, Burma where his surgeon father was head of military services. He graduated from Oxford in 1961 and married a staff nurse at St Mary's, London. He was inspired in science by a biography of Pasteur he read at school and by his tutor at Oxford (also his second cousin), the respiratory physiologist DJC Cunningham (University College). Incidentally, Cunningham also tutored the author of this citation, in the 1980s. With Cunningham he co-authored 4 papers in human respiratory physiology in the 1950s (one is still regularly cited, with >100 citations).

Ronnie was senior lecturer at Bristol but was appointed to the new Medical Research Council (MRC) unit at Northwick Park in 1972 and placed in charge of the obstetric service (working with Lehane who was appointed in 1978 and made honorary consultant in 1980). Little now needs to be said in this citation about the extraordinary success of the famous paper and the grading scale. Its citation score of >1600 makes it one of the most quoted papers in the whole of science, and in fact that probably is an underestimate as the scale is so often referred to without a citation. It is quite simply impossible to write any article or paper on any aspect of airway management without quoting the work of Cormack and Lehane. The MRC gradually withdrew from Northwick Park in the 1980s because of government cutbacks. Lehane moved to Oxford in 1984, and Ronnie took early retirement to focus on his research interests and writing. His other interest is statistics and amongst other things he has published an exact solution for Fisher's Exact Test (the programs for which are being updated in a collaboration with the author of this citation). Thus at over 80 years of age, Ronnie is still very active, researching and publishing.

It is a pleasure for the Difficult Airway Society to confer the Macewen Medal on someone who has contributed so much to anaesthesia and in particular the areas of airway management and improved patient safety.

**Professor Jaideep J Pandit**

## **Dr John Robert Lehane-**MCEWAN MEDAL 2013 CITATION

In 1984, *John Robert* Lehane and *Ronald Sidney Cormack* , at that time anaesthetists at the Northwick Park Hospital in Harrow, United Kingdom, published a simple classification system for grading direct laryngoscopy in '*Anaesthesia'* . Their landmark contribution to clinical anaesthesia soon achieved general acceptance and promoted further improvements. Since the publication, the two names have become linked like the two sides of a coin and it is difficult to mention one without mentioning the other.

The 'Internet Journal of Airway Management' in December 2009 wrote a special piece to celebrate the 25th anniversary of the Cormack and Lehane classification. Such is the significance of their work that it is impossible to read or write a chapter on airway management without referring to these two famous names. Dr.Lehane with Dr.Cormack are amongst the most famous names in anaesthesia.

John Lehane was born in 1945 and was educated in Merseyside. He moved to Northwick Park in the mid-seventies. It was here he met Cormack and together they worked on a system of teaching anaesthetic trainees intubation in obstetric patients. This resulted in their famous classification of the laryngeal view into four grades.

A highly respected teacher and consultant anaesthetist, Dr.Lehane moved departments to Oxford from where he retired after a long illustrious career.

For the immense contribution to the field of anaesthesia, patient safety and airway management, DAS is delighted to award the Macewen Medal to John Robert Lehane.

**Dr Ravi Dravid**

# DIFFICULT AIRWAY SOCIETY

# 2014 ANNUAL SCIENTIFIC MEETING

## Stratford-upon-Avon

*Home of William Shakespeare*

## 12th-14th NOVEMBER 2014

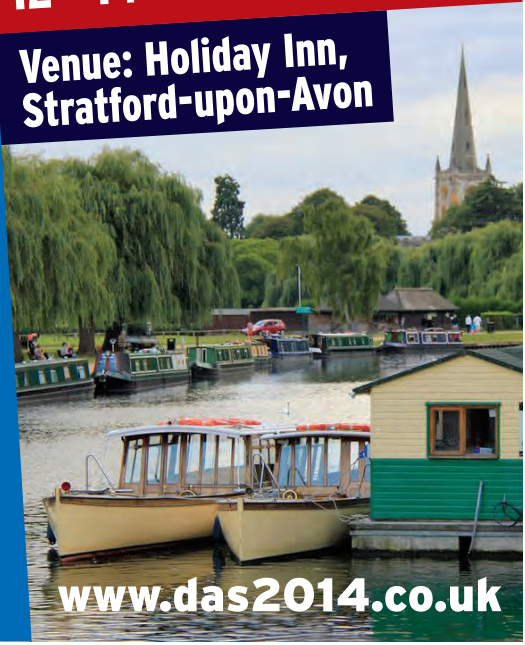
**Venue: Holiday Inn, Stratford-upon-Avon**

## WORKSHOPS

- Traditional • Human cadaveric
- Simulation • Paediatric

## SCIENTIFIC PROGRAMME

- Airway in special circumstances
- Controversies in airway management
- Intubation - ventilation - publication
- Airway training: Is it perfect? Trainee's perspective
- Airway management in the wild
- Airway challenges in Africa
- Case scenarios
- ODP parallel session



**www.das2014.co.uk**

# ANNUAL SCIENTIFIC MEETING

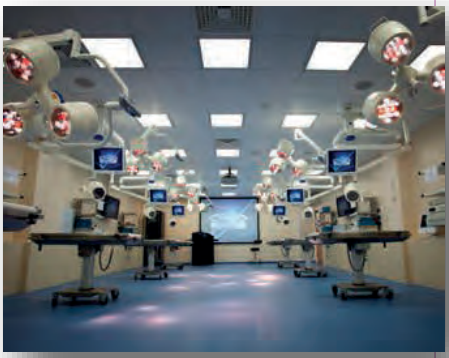
## 12th - 14th November 2014, Stratford-upon-Avon

An exciting feast awaits us all at Stratford-upon-Avon.

The workshops on the 12th of November offer you a variety not seen before.

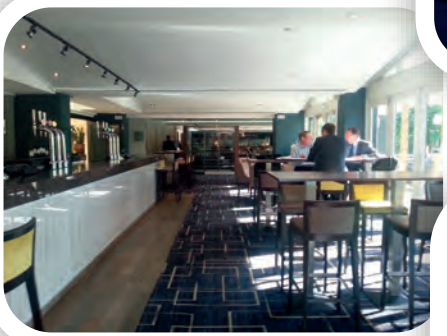
While the traditional workshop at the Holiday Inn provides you with the skills needed for basic and advanced airway management, there are three individual parallel sessions set up at the University Hospitals of Coventry and Warwickshire (UHCW) that offer more specialist training. Transport will be provided.

For the first time in its history a DAS ASM offers a human cadaveric workshop. The human cadaveric lab at UHCW is rated one of the best in Europe. The workshop is limited to 22 places for airway enthusiasts. At the time of writing this 11 places have been booked. A team of experts lead by Prof. Levitan (Philadelphia) will use the best techniques of video cinematography including 3-D to offer you a rare insight into airway anatomy. You will be taught every aspect of airway management from supra-glottic airways, direct and video laryngoscopy through to surgical airway techniques. Separate paediatric and simulation workshops aim to give the participant training in the respective challenges of children and crisis resource management. This will be an intense learning experience.




1450
café bar


Herbert




www.brilliflex.co.uk

There will be a complimentary welcome reception with drinks and canapés after the close of the workshops on Wednesday at the Holiday Inn, Stratford-upon-Avon. This will also allow delegates and exhibitors to network in a relaxed atmosphere.

The lectures on the 13th and 14th cover various interesting topics from pre-hospital airway management, challenges in paediatrics and morbid obesity plus airway management in the intensive care. The case based discussion, where delegates share their experiences will add a further interactive feature.

The DAS Gala Dinner will be held, close by, at the Stratford Arts House on Thursday night. This is the highlight of the conference social events and will start with a drinks reception from 19:30, followed by a 3 course meal with wine and entertainment. Please join us for a entertaining and memorable evening.

The Co-Pilots, the ODPs, have a special say this year with a parallel session of their own on Friday. Oral and poster presentations by the trainees are valued highly by the Society and we expect over 150 posters this year.

The Royal Shakespeare Theatre, Shakespeare's house and his grave are just a short walk from the conference headquarter hotel. Restaurants and pubs are just a stumbling distance from the venue. Avail yourself of free parking and you should not need to use your car again until you drive away with a smile of satisfaction at the close of the conference.

If you like theatre, book yourself a seat at the Royal Shakespeare Theatre through our web link.

Which place in the world would combine education, history, entertainment, serenity and beauty with gastronomical delights?

***Welcome to Stratford-upon-Avon for the DAS 2014 Annual Scientific Meeting!***

**Dr.Cyprian Mendonca** and
**Dr.S.Radhakrishna**

On behalf of the local organising committee

UHCW,Coventry.

## DO YOU HAVE AN INTERESTING CASE TO SHARE??

One of the highlights on this year's DAS Annual Scientific Meeting 2014 is the Case Based Discussion session. We are inviting interesting airway related cases for presentation and discussion. The selected cases will be presented in a set format by a DAS local organising committee member. We will be using 'TurningPoint' software for audience response. The audience will be able to vote for their most preferred mode of airway management. At the end of each case, the experts will comment on how they would have managed the cases themselves. Finally, how the case was actually conducted safely by the authors, will be revealed.

At the conclusion of the session, the contributors of these cases will be invited on to the stage and given a certificate from the experts as acknowledgement of their contribution to DAS 2014.

Please submit your cases by 31st August 2014 to

peeyushkr@yahoo.com

## Dr Muhammed Aslam Nasir

Inventor of iGel® supra glottic airway

Since the advent of Dr Archie Brain's original laryngeal mask airway in 1983[1], the need to secure and maintain a patent airway has been the springboard for a vast array of supraglottic airway devices (SADs).

In the past, most SADs were reusable, made of silicone, and incorporated an inflatable cuff. Although mostly effective, they also had the potential to rotate in-situ, cause compression trauma and usually did not incorporate a purpose built mechanism for the management of regurgitant fluid[2]. Sterilisation was (and remains) expensive and the risk of cross-contamination a serious potential issue[3].

I first became aware of the specific limitations of what is now known as 'first generation' SADs in airway management during my time as a house officer in surgery, in particular the stark choice between face mask ventilation and ventilation through an endotracheal tube. Surely there must be a middle ground?

After moving to the UK, my motivation for an atraumatic, anatomically-shaped supraglottic airway device snowballed. I wanted a device that was single-use, softer than the human tongue, and designed to minimise post-operative complications.

Unfortunately, I did not have the opportunity to develop the design further until 1990. During the intervening period I carried out significant research on other supraglottic airways and concluded that existing devices had similar limitations: rotation, malposition, malfunction whilst in-situ, insertion and compression trauma and post-operative morbidity.

What was most significant to me though was the lack of a device that tried to mirror the peri-laryngeal framework. So, armed with the background knowledge of other devices, I started to develop my anatomical airway. From magnetic resonance images (MRI), computerised tomography (CT) images, manikins and structures identified during laryngoscopies and fibreoptic intubations, I began to design a model of the face of the device.

**Prototype and testing in America:** By 2003 I had a plaster of paris model, based on extensive cadaver and anatomical testing at the anatomy department of Cambridge University, later advancing to computer aided design (CAD) models and eventually a silicone prototype.

The crucial factor at this stage of strenuous testing was twofold: the development of an insertion technique and the evaluation of correct placement.

However, due to the rigidity of embalmed cadavers, rather than mirroring soft tissue in-vivo, the non-inflatable cuff was pushing up against stiff tissue – clearly this wasn't accurate. On the plus side, it did allow us to confirm where the device was locating and to take impressions of the anatomical structures involved.

Real progress came in the USA. Now in partnership with Intersurgical Ltd, access to fresh cadavers was obtained, and through the work of Dr Richard Levitan, we were able to assess insertion, seal, function and positioning of the device. Ultimately this work led to the first study on the device by Levitan and Kinkle, published in '*Anaesthesia'*. Here, 65 non-embalmed fresh cadavers were used to study the positioning and mechanics of the new device heralding positive results[4]. We now had huge confidence in the device and felt comfortable taking it forward for testing in a patient population, but not without modifications.

**The final stages:** It was decided to remove the original three distal openings, leaving in place the current, wider opening you can see today. This change was seen as a milestone in the development of the device, as with one opening it could now be used as a conduit for intubation.

The next biggest challenges was the choice of materials, and what to call it.

Obviously it had to be soft, malleable and yet robust enough to perform efficiently in the most testing clinical scenarios. We eventually selected styrene ethylene butadiene styrene (SEBS).

Over 100 names were put forward, most of them in some way referencing the contoured shape of the device's 'head'. 'Remora' (after the fish) and 'Cobra Mask Airway' were early front-runners. In the end, it was the material that prompted Intersurgical to call it 'i-gel®', the Intersurgical Gel Airway, as it reflected both the physical and clinical characteristics of the device.

**Features and benefits:** The innovative design of the i-gel® provides a number of valuable characteristics, none more so than the non-inflatable cuff. Initial tests, backed by subsequent clinical studies, proved this alone had several advantages. Faster insertion time, easier insertion mechanics, minimal risk of tissue compression and low post-operative complaints were all cited[5,6,7,8,9,10].

Performance as a second-generation supraglottic airway device, highlighted by the gastric channel, is crucial to its performance. This built-in channel provides an early warning of regurgitation, allows for the passing of a nasogastric tube to empty the stomach contents and can facilitate the venting of gas from the stomach. The Intersurgical i-gel's® specially designed shape forms a tight seal over the laryngeal inlet, fitting comfortably to the surrounding structures in the most natural way possible, allowing for optimal blood flow and minimising neurovascular compression.

Other features include a built-in bite block, a buccal stabiliser to minimise rotation in situ and an epiglottic rest to prevent the epiglottis from down-folding[11].

**The launch:** After 19 years of research, manufacturing and development; from idea to existence; from visual to clinical assessment, the i-gel® supraglottic airway device was launched in January 2007 at the Association of Anaesthetists of Great Britain and Ireland's Winter Scientific Meeting at the QEII Conference Centre in London.

Seven years on and the device is the subject of over 150 clinical studies, case reports and other correspondence; is sold in over 80 countries and has extended its indications for use to include resuscitation and use as a conduit for intubation.

www.i-gel.com

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# PAEDIATRIC AIRWAY: Scopes and Syndromes in the States

**Dr. Sumanna Sankaran**

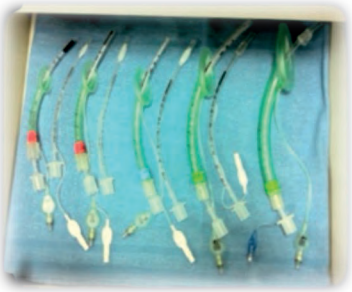
*ST 7, Warwickshire School of Anaesthesia*

I spent 12 months as a visiting instructor in paediatric anaesthesia at the CS Mott Children and Women's Hospital in Ann Arbor, Michigan. As part of the University of Michigan, the hospital is a tertiary referral center for complex paediatric patients. Ann Arbor is a leafy, middle-class city known locally as 'Tree Town'. The University of Michigan, Google and Domino's Pizza are the main employers in the region. Ann Arbor prides itself on excellence in academics, sports and arts, having the bohemian feel of an established university town. It experiences hot, humid summers and cold winters. Proximity to Detroit provides easy connections to many destinations in America with Chicago being a 4 hour drive away.

Children with complex craniofacial syndromes present to the hospital for a variety of procedures under general anaesthesia. Dealing with paediatric airways is potentially challenging due to the limitations of awake techniques in children coupled with anatomical and physiological differences compared to adults. Nasopharyngeal airways prove invaluable in babies and children who are difficult to bag-mask ventilate due to micrognathia (e.g Pierre-Robin and Treacher Collins syndrome). Oropharyngeal airways are useful in the smaller infant. Suction catheters were routinely used to decompress the stomach after prolonged bag-mask ventilation. In the 'cuffed vs uncuffed' debate most anaesthetists favoured cuffed endotracheal (ET) tubes; measuring cuff pressures with each intubation. Stylets were used in ET tubes as these were believed to increase intubation success and cause less airway trauma than paediatric bougies. As with adults, laryngeal mask airways were used as 'rescue' and provided a conduit for intubation particularly in children with mid-face hypoplasia (e.g Crouzon and Aperts syndrome) in whom obtaining a good facemask seal is often difficult.

The hospital had wide a range of equipment to help with difficult intubations; including neonatal, paediatric and adult fibreoptic scopes and a multitude of video laryngoscopes. In theatres the Glidescope® and Storz C-MAC® were widely utilized. Neonatal and paediatric Glidescopes were available in the paediatric ICU and emergency departments. When faced with an anticipated difficult intubation in a syndromic neonate or infant my equipment of choice was the Storz Miller 1 video laryngoscope. This is not interchangeable with the C-MAC but can be inserted into the theatre stack system providing a view on multiple screens, which is handy if intubating a tricky ENT patient with a surgeon standing by. This video laryngoscope is compatible with the connection for the fibreoptic scope on the same stack system.

Different sizes of equipment and ET tubes in paediatrics can be confusing, especially when using techniques such as fibreoptic intubation via LMA in an emergency. We devised a simple chart as an aide memoire for fibreoptic scope and ET tube choice while intubating through an LMA to be attached to the difficult airway trolley (see chart below)



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Intubating via LMA

| LMA Size | Uncuffed ET | Cuffed ET | Size Fibreoptic Scope (mm) |
|---|---|---|---|
| 1.0 | 3.5 | 3.0 | 2.2 |
| 1.5 | 4.0 | 3.5 | 2.2 |
| 2.0 | 4.5 | 4.5 | 3.0 |
| 2.5 | 6.0 | 5.0 | 3.7 |
| 3.0 | 6.0 | 5.0 | 3.7 |
| 4.0 | 6.5 | 5.5 | 3.7 |

Spending time at the CS Mott Hospital enabled me to gain substantial experience in the use of paediatric video laryngoscopes and flexible fibreoptic scopes. Despite the temptation of using different gadgets, the goal in managing an anticipated difficult airway is always to maintain oxygenation while minimizing airway trauma. A handy ENT surgeon standing by is also always helpful!

If it got really difficult we called for the super heroes!!

** Due to the differing dimensions in external diameter of ET tubes and internal diameter of LMAs available this table indicates what combinations work at CS Mott Childrens Hospital.*

# FIRST PRIZE WINNING ABSTRACT–ASCOT 2013

## Multicentre randomized controlled trial-
## Evaluating six video-laryngoscopes in a simulated difficult airway scenario: First insights after 339 of 720 patients

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Although video-laryngoscopes (VLS) enhance epiglottic view and may have promising benefits in dealing with difficult airway situations, intubation is not always more successful. Therefore, we evaluated six VLS in a multicentre RCT in Switzerland, using stiff extrication collars to create a difficult airway in a planned total of 720 patients.

**Methods :** With the approval of the local ethics committee (and submitting to a clinical trial database, NCT01692535), six VLS were evaluated: Three VLS with a guiding channel for intubation (Airtraq™, A.P. Advance™, KingVision™) and three VLS without an integrated tracheal tube guidance (C-MAC™, GlideScope™, McGrath™). The primary outcome was intubation success at first attempt within 180 seconds. Secondary outcomes included overall success rate, time necessary until intubation, percentage of glottic opening (POGO) score and side effects. All analyses were made with SPSS, v.20.0.0.Results so far, 339 patients were included; 138 (41%) have been female. There were no demographic differences among the patients. Mouth opening with the extrication collar was reduced to 24±4mm. Rate of successful intubation at first attempt, overall success and time necessary were significantly different among devices (see table). POGO score was best in C-MAC and Glidescope (89% each) and worst in A.P.Advance (71%, p=0.001). The others scored between 82-86%. There were no serious adverse effects and no periods of hypoxia during intubation.

*The research team in the 'lab'*

**Discussion:** With the exception of the A.P.Advance, all devices reached overall success rates above 95%. First attempt success rates were generally higher in devices without an integrated channel for intubation, allowing for additional manoeuvrability of the tracheal tube. The guiding channel offered no additional advantage. In this difficult airway situation with limited mouth opening, smaller devices such as the McGrath or the C-MAC seem to be favourable.


# Fat Chance

## The bitter truth about sugar

**Dr Robert Lustig**

*Published by Fourth Estate*
*ISBN 978-0-00-751412-0*

'This book is written only for those of you who eat food. The rest of you are off the hook.'

So starts the preface to this significant book published last year by American paediatric endocrinologist Dr Robert Lustig. We don't need to be told that our patients are getting fatter! This may not have as significant impact on difficult intubation as many think but its contribution to the risk of hypoxia is great. The World Health Organisation now estimates that the percentage of obese humans has doubled in the last 28 years, with actuarial tables in 2003 showing that a BMI of 45 makes you lose 20 years of life.

As the author states, where America leads the rest of the world follow. This is a book that covers the topic from recent advances in the understanding of energy balance and the hormonal milieu involved, through to the political machinations of agricultural lobbying and the food industry. In between he provides a convincing argument as to why sugar fulfills the criteria for being an addictive substance. The role of fructose is examined as a veritable modern day toxin where not all calories are the same despite the first law of thermodynamics remaining unchanged.

The balance of personal responsibility against societal responsibility is examined. He summarises that in a free market economy the supply of food is all about making money, not providing healthy choice for the masses, economic freedom does not work with addictive substances.

It's not all doom and gloom. There is an excellent section on what you can do as an individual to manipulate your physiology and keep to a healthy weight. This is not a book espousing another dieting fad but good metabolic sense. The greater societal changes needed are outlined but will be much harder to achieve.

This is a readable, current book on a subject that affects us all. If you want to find out why the Germans were right after all you'll have to buy the book!

**Dr Mark Price**

Consultant, Cardiff and Vale UHB

# MULTICENTRE PROJECT PRIZE

DAS is pleased to announce the creation of a new prize category for Best Multicentre Project at this year's Annual Scientific Meeting in Stratford-Upon-Avon.

The prize is reserved for human experimental studies (not surveys, questionnaires, meta-analyses etc.) that involve three or more distinct hospital centres (i.e. those that are not part of the same NHS Trust).

At the last DAS meeting in Ascot, the organising committee noted that several studies were being repeated on a small scale in multiple centres. This prize is to encourage researchers to use DAS networks to contact with each other, and so promote collaborations across hospitals and regions and increase the size and impact of valuable projects that are being conducted locally.

If you have any questions, please contact

**trainee@das.uk.com**

# Exciting news for ODPs and anaesthetic nurses at the Difficult Airway Society Annual Scientific Meeting

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**For further information contact:sudheer.medakkar@nhs.net**

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