



Difficult Airway Society

NEWSLETTER



AUTUMN 2017

EDITORIAL

Welcome to the Autumn 2017 Projects edition of the DAS Newsletter.

In this edition, there are updates on the latest sets of guidelines which are in development; the ICU one is ready for publication and will be launched at the ASM in November. Dr Karthik Ponnusamy tells us about the encouraging progress that the DAS Difficult Airway Alert Card and Database pilot project is making.

DAS continues to champion safe anaesthesia and help medical personnel not just in this country but worldwide in providing guidance on airway management. DAS guidelines are being translated into yet more foreign languages, the latest being Croatian. DAS is providing DAS Verification for overseas courses and there is much interest in Latin America in the work of DAS.

Putting guidelines into practice, in this edition Dr Katie Ellen Foy explains how whilst a junior fellow in Zambia she was involved in setting up a Difficult Airway Trolley as per DAS guidelines.

Have you ever wondered how much it costs DAS to produce a guideline? Read on! Andy Higgs, our treasurer sets out an estimate of how much a DAS guideline costs. It's a significant amount, but the actual costs paid are a lot less. Annual DAS membership still costs just £25 which is excellent value for money, and one of further benefit of membership is receiving this newsletter.

Have you booked your place for the ASM 2017 in London yet? The meeting runs from 22nd to 24th November. The workshop and programme planned sounds excellent. Come along to hear about all the latest airway management projects!

Dr Joy Beamer



Dr A Sajayan Dr Joy Beamer

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PRESIDENT'S PAGE

Following on from the work of the DAS Guidelines Implementation Group new training material is now available to supplement DAS guidelines. I encourage you to view and use the PowerPoint slides, videos and summary slides whilst teaching in theatre, workshops and during presentations. The group has spent a lot of time and effort putting these educational resources together and the end result is hopefully found to be user friendly. I am sure the Airway Leads will give us feedback, suggestions for improvements and ideas for future training material.

This edition carries an excellent article by Dr Bonnie Kyle on an airway risk tool for use following anterior neck surgery. It describes the complexity of airway problems post operatively and how easily symptoms can be confused. The development of a simple SHOUT Airway Risk Tool attempts to increase awareness of 'airway symptoms' for those not routinely involved in airway problems and to escalate early.

In the summer DAS Newsletter, I mentioned that the 2015 Intubation guidelines had been estimated to have cost in the region of £200,000 and this year the 2017 Critically Ill Airway Management Guidelines are estimated to have cost at least £140,000. Our members and treasurer will be relieved that the vast majority of this cost is for consultant time which is voluntary and not paid. It does appear however that to write a DAS guideline requires a period typically around 2-3 years, a group of 6-10 individuals, around 20-30 face-to-face meetings, a lot of work and around £150,000 to £200,000. The attention to process and an attempt for simplicity in the final document is perhaps one of the main reasons why our guidelines have been adopted by so many countries.

Over the last year, a number of new DAS groups have been forming to look at (i) Awake Intubation, (ii) Human Factors and Airway Management, (iii) Consensus on Airway Nomenclature, (iv) Guidance on the Ethics of Airway Management and (v) Management of the Obstructed Airway. Our plan is for these groups to be providing guidance on these topics over the next one to three years. The first of these led by Dr Imran Ahmed will give a 10 minute presentation on the development of DAS guidelines for Awake Intubation at the ASM in London.



Hope to see you at the ASM in November,

Anil Patel

SECRETARY WRITES.....

As we approach this year's DAS ASM in London, there is a lot going on behind the scenes within DAS.

As I have mentioned in previous reports, DAS is keen to extend its international links and this involves several areas. The number of overseas courses applying for DAS Verification continues to rise. DAS sends a committee member to visit such courses prior to providing this accreditation and the process is hugely beneficial in terms of developing consensus on airway management approaches – DAS requires that such courses follow the recommendations in its guidelines.

Translation of DAS guidelines continues – most recently into Croatian - and the numbers of countries overseas keen to use them in their training and practice appears to be increasing steadily. The interest in DAS and its guidelines in Latin America is particularly encouraging. More than 20 countries in this continent liaise on airway management training and all teach approaches in which DAS philosophies are central. This autumn, several members of the DAS committee, myself included, have visited Latin American courses in both Chile and Argentina and we have all been hugely impressed with the quality of the teaching, the consistency in DAS ethos being taught and the infectious enthusiasm and fun in which all the faculty conveyed whilst providing the training.

Interest in DAS overseas membership continues to rise and, as mentioned, there is huge interest in Latin America that may lead to the development of a special liaison between DAS and the leading airway groups in that region. This will support cross-fertilization of ideologies and help promote a more global consensus on airway management.

Finally, DAS has been asked to organise parts of overseas airway meetings headed by other groups. This is a huge logistical challenge but something that we are exploring.

As mentioned in my last report, DAS is committed to the development of future guidelines. One such guideline relates to Airway Management Nomenclature and the DAS plan to develop guidance which will reflect an international consensus on terminology that should improve clarity within airway management publications and teaching. The expectation is that DAS will liaise internationally with established airway management organisations across the world, including those in continental Europe, Australasia and Pan-America. Launching such a guideline at WAMM2 in Amsterdam in 2019 would seem apt, but whether such a plan is achievable remains to be seen!

Several other DAS guidelines groups are currently meeting. Anticipated Difficult Airway Guidelines, essentially awake airway management, are well under way and guidelines considering the management of the Obstructed Airway, the Ethics of Airway Management and Human Factors in Airway Management are all in the early discussion phase. However, the ICU Guidelines are now completed and set to be launched at DAS London ASM. I am certain that these fantastic guidelines are going to have a huge impact on airway management safety in critical care within the UK and worldwide and the hope is that they may also extend to use in Emergency Medicine. .

The DAS Guidelines Implementation Group (DIG) has now completed the production of high quality educational material in the form of videos and slide sets to assist airway teachers in delivering the DAS educational messages. This material will be available on the DAS website very soon and considers aspects addressed in the 2015 Unanticipated Difficult Intubation Guidelines, such as the equipment involved in each of the 4 steps, the DAS recommended emergency front-of-neck-access (FONA) technique and conversion of a supraglottic airway to a tracheal tube.

Finally, DAS continues to work on its Airway Alert database with a steady increase in the number of participating hospitals. The planning of a national FONA audit and database continues to take shape and we hope that this can be launched in the not too distant future.

Keep up the great work and please do contact with us with any ideas or suggestions you might have.



Barry

B McGuire

Hon. Sec. DAS

TREASURER'S REPORT

I'm writing this having finally relented and changed the settings on the central heating. The nights are drawing-in and I can see the smart-meter in the kitchen picking up the pace. It's clear *life is getting expensive!*

Now writing Treasurer's Reports always risks breaking the Great British taboo of talking about money but I'm a past-master of faux pas, so please, indulge me...

In a previous Newsletter, I promised to combine my roles as Treasurer and that of Chair of the joint DAS-ICS-FICM-RCoA Critically Ill Airway Management guideline group and hazard a guess at how much producing a DAS guideline costs. For the sake of argument, let's play real-world. *What would it take on the 'open market', if you could buy guidelines off the peg?*

I will endeavour to 'show my workings', as my maths teachers always seemed to say: -

Going by previous experience, a national guideline seems to take about 3 years from beginning to end and that's what it took us. There were seven members of the group: all very busy, highly trained professionals from senior trainee level all the way through to world-renowned professors at the top of their game, not to mention an ex-President of DAS (the biggest airway society in the world), the current Hon. Secretary and now President-elect of the ICS: Very senior professionals. Now, my Trust pays £70/hr for non-resident on-call and £100/hr daytime – peanuts for senior staff in other ranking professions!

We held 19 face-to-face meetings, all but one (Warrington) in London. (That a group of seven people, four of whom are based in Northern England found it easier to meet in London implies transport links in t'north MUST be upgraded, but don't get me started). Most were held at the RCoA which only charged DAS for the sandwiches and coffee (and guideline groups drink a lot of coffee). Bear in mind on the open market, a meeting room for seven people with full IT facilities in Central London, with food and refreshments, costs £550-600 per full day.

Travel was the biggest actual cost and second biggest nominal cost: I estimate it would be somewhere north of £13 000, given not everyone attended all meetings. I confess I did travel 1st Class for some journeys, but only when Virgin charged the same for 1st and Standard Class (can anyone please explain to me how that works?) Of note, travel was also part-covered by the RCoA and Intensive Care Society / Faculty of Intensive Care Medicine.

The largest single nominal cost incurred is consultant time - for work done on top of full-time clinical duties, trawling through pdfs of abstracts, reading articles, writing drafts, revising drafts, tearing-up drafts and starting again, contributing to group email discussions as well as the full day London meetings. Any time in pubs near Euston Station was strictly self-funded, I assure you!

In the last few months, simply project-managing the 'final' draft (>10 000 discussed, debated, argued-over but finely-honed words!) and liaising with over 30 experts representing airway communities in six continents demands a great deal of time and will-power: producing draft after draft of algorithms and checklists takes a special kind of masochism (note to self: NEVER, ever, attempt to get a group of intensivists to agree an intubation checklist again - your life-force isn't strong enough). I'm going to *very* conservatively estimate that at £140 000. Add in graphic support and permissions: £600. That gives a nominal grand total of about... £169 000.

What did DAS actually pay (travel, food, room-hire, graphics, permissions)? -£13 200. The magic of the British medical profession and the logistical support of the Royal College of Anaesthetists reduced costs by a whopping 92%! So, maybe life isn't that expensive, after all.

In a similar vein, the DAS subscription has stayed at £25 despite an unavoidable 250% increase in administration costs from our office at the AAGBI. This remains a lot cheaper than other comparable specialist societies and yet affords DAS an enviable reputation for the breadth and quality of our output and a nationwide network of Airway Leads – a template now being copied overseas. Members themselves get access to up to £15 000 each for original research, full access to the DAS website and forums, support for educational projects at home and abroad as well as discounted rates for the most popular national airway meetings in the world together with this quarterly newsletter. It also allows members to apply for official DAS endorsement for your local and regional airway courses.

As I just said, maybe not everything is expensive these days.

And so, in conclusion, whilst I agree with Luther Vandross that *the best things in life are free* (who wouldn't?), I'd like to add the rider that some really good things are still only £25!



See you at the Mermaid in November,

Andy

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DAS FUNDED PROJECTS

Improving Airway Safety in the University Teaching Hospital Intensive Care Unit, Lusaka, Zambia

The Zambia Anaesthesia Development Program (ZADP) is a UK based organisation, which aims to support the development of a safe anaesthesia service in Zambia. I recently spent 6 months working with ZADP, and during my time in Zambia I was able to initiate a quality improvement project to improve airway safety in the Intensive Care Unit (ICU). The project used the DAS 2015 guidelines as a framework for safety standards, and was generously funded by the Difficult Airway Society.

The project developed from discussions with local clinicians that made it clear that airway safety was a real concern in ICU. Common themes were a lack of equipment and a need for increased training for both nursing and medical staff.

To gather some evidence, I completed a 5-day equipment audit, looking at the availability of the basic equipment required to manage a 'Can't Intubate, Can't Oxygenate (CICO)' situation.

The audit confirmed there was a significant lack of equipment. On some days there was no working laryngoscope or a bougie and supraglottic devices were not regularly available. On one day, no bag-valve-mask was available. There was no emergency front of neck access (FONA) equipment available on any day. In addition, we ran an in-situ simulated CICO situation, which highlighted that it took 15 minutes to get the equipment required to manage a CICO.

After presentation of the results we worked with local ICU staff to create a strategy for improvement. Our key interventions were: adaption of the 2015 DAS guidelines to the Zambian environment, creation of an airway rescue trolley (ART) and training for both nursing and clinical staff.



The ART before and after the project

We held national focus groups to ensure our adapted DAS guidelines were best suited to the Zambian environment and these guidelines have now been accepted as departmental policy at UTH.

Implementing the ART proved challenging at times, as there was a lot of resistance to change from the ICU nursing staff. However, after a few changes (and negotiations!) the ART was successfully introduced in June 2017. Ongoing audit has shown the ART is being maintained, but establishing daily checking is a work in progress!



One big achievement was that we were able to provide simulation based CICO training to all non-physician anaesthesia trainees based at UTH. All trainees were given the opportunity to practice performing emergency FONA (with the help of homemade larynxes!). The session received excellent feedback, with lots of requests for more sessions!



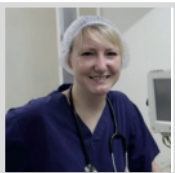
The project continues with leadership from local anaesthetists and the new ZADP fellows. The next big step is the introduction of capnography. Funding provided by DAS has been used to purchase a portable capnograph.



The ZADP Team (L-R) Dr M Le Cheminant, Dr S Akrimi, Dr N Lal and Dr K Foy (Plus Dr. Mcleod senior ZADP fellow - hard at work elsewhere)

I would like to thank all those involved, especially DAS, in making the project an ongoing success!

For any further information on ZADP, our website is www.zadp.org.



Dr. Katie Ellen Foy

Junior Fellow, Zambia Anaesthesia Development Program (ZADP)

TRAINEE ESSAY COMPETITION-WINNER

Technology & Airway: Real advances or style over substance?

To answer this question, we need to delve into the annals of history and examine how airway technology has evolved. From ancient Egyptians performing tracheostomies thousands of years ago, to cutting-edge techniques using robotics, the journey of airway management has been an eventful one.

In 1967, Murphy intubated the first patient fibreoptically, using a surgical choledochoscope. He had read an article in the *Lancet* about using flexible choledochoscopes for examining the common bile duct and he instantly saw its potential as a difficult intubation aid. Following his publication in *Anaesthesia*, otolaryngologists immediately realised the possibilities of this new discovery, but anaesthetists were reticent to adopt the technique and it was over a decade before fibreoptic intubation became an accepted practice, particularly for anticipated difficult airways.³ 2011's NAP4 highlighted that awake fibreoptic intubation (AFOI) was underused for predicted difficult airways and is the gold standard in anticipated difficult airway management, although that is a controversial statement today with the advent of video laryngoscopy (VL). It is worth noting that to be fully proficient in fibreoptic intubation (FOI) requires substantial training and dedication to maintain the skill which many anaesthetists find challenging.

The next major airway advance came courtesy of Dr Archie Brain with the laryngeal mask airway (LMA) in the 1980s. He found holding facemasks to be "a bit awkward" and set out to find a solution and after much perseverance, the LMA was born. This truly revolutionised the way anaesthesia was undertaken and it was adopted exceptionally quickly, particularly for managing the difficult airway. The timely implementation may be because he adhered to the three tenets derived from Leavitt's Diamond: People, Process and Technology. When followed, this approach improves the likelihood of a change being accepted. Dr Brain went through countless revisions of the LMA perfecting it and was able to produce it swiftly and in large volumes by the Laryngeal Mask Company (Technology); was able to define the insertion technique, rationale, and purpose (Process); and had reams of data lined up to convince anaesthetists of its worth to them (People).⁹ Part of the LMAs enduring success may also be that the technology was so innovative that it couldn't be overlooked.

The final major notable technological leap is the invention of video laryngoscopy (VL), which has been hailed as a possible replacement to direct laryngoscopy (DL). Whilst it is too early to say whether it merits this plaudit just yet, it is not in doubt that VL has improved the ease of intubation in predicted difficult airways.⁵ It appears to be easy to use with limited training, with 20 attempts being proposed as sufficient.⁵ VLs have not been adopted for routine practice, however. This may be because the three Leavitt principles have not been addressed. Whilst VLs utilise a new theoretical principle – the concept of indirect laryngoscopy – there is little to distinguish between them. Unlike with the LMA, there haven't been multiple case series or trials to assuage clinicians. Also, whilst the LMA was a totally unique approach to airway management, VLs essentially serve the same purpose as the direct laryngoscope – to facilitate intubation – albeit through a different manner. It is always more difficult to alter usage of a device ingrained in current practice.

The American Society of Anesthesiologists' 2013 Difficult Airway Guidelines remind anaesthetists to consider using a VL for a predicted difficult airway. This is an oxymoron as anaesthetists are notoriously inadequate at accurately predicting difficult airways. A study in Denmark in 2014 showed that of over 3,000 difficult intubations over 93% were unanticipated. This does lead one to suppose that if VLs were used habitually perhaps the incidence of difficult intubation would be less. What the clinical significance and benefit to the patient that this would offer is not so easy to quantify.

Airway equipment advancements cannot be considered in isolation, and progress is continually being made in fields allied to this. For example, work is currently being undertaken to look at other predictors of difficult intubation such as sublingual ultrasound. If a technique such as this increases detection of difficult airways then maybe using VLs simply for anticipated difficult airways is of virtue.

It is worth bearing in mind, as with all the other airway advances that were made historically, VLs are not a panacea. There are still going to be clinical situations where the device is required to manoeuvre around a corner. This is the unique selling point of a FOI scope. If we allow the skill of FOI to die out by directing all our training resources to VLs, we may be left in a troublesome situation for a minor cohort of patients.

The miscellany of new airway devices seems to be ever accelerating. Back in 2008, a purchasing review was published on laryngeal masks available for acquisition in the UK. There were a staggering 45 different types offered. There was also a plethora of laryngoscope blades saturating the market, with 31 different Macintosh blades alone being provided for testing to the CEP in 2008. This does not include those manufacturers that declined to participate. When one considers the cacophony of equipment available: blade styles; supraglottic airway devices; channelled, unchannelled, and stylet video laryngoscopy devices; fiberoptic scopes; lightwands; and even robot-assisted intubation to name but a few, it seems incredulous that one could be proficient on the entire contents of the modern anaesthetist's armamentarium. Could this be why we, as a cadre, still do not reach for these tools perhaps as often as we should?

There is some reticence to accept VLs into widespread practice.¹² Why is it that anaesthetists are so averse to change and learning new approaches? Perhaps it is concerns about competence¹⁹. These new devices require training, and skill maintenance which present an ethical dilemma. When a user is proficient with a particular piece of equipment, even if another device perhaps is associated with less morbidity, the learning curve associated with mastering the new instrument may create an overlap period in which the second device is more likely to cause harm to the patient whilst the user gets up to speed. Perhaps it's the fact more work is involved. Retraining in equipment which may be replaced shortly anyway requires investment in time and knowledge gathering, and also a mentor to impart said knowledge. Do not forget anaesthetists are creatures of habit.¹⁹ Why reach for a new, untested, unproven device when in expert hands a laryngoscope may be just as effective? The final aspect to this is maintaining control.¹⁹ Anaesthetists are an intelligent, dominant, serious syndicate and aren't keen on having change thrust upon them, particularly if they have had no say (or been ignored!) when it comes to purchasing decisions.

When examining whether technology provides style over substance it would be extremely helpful if there was an agreed set of metrics that could be audited. The Airway Device Evaluation Project Team (ADEPT) addressed this issue in 2011. It is surprising to note that although medical devices have to conform to the CE standard, they do not have to have any clinical trials performed to determine their efficacy before they are brought to market. It is very difficult to quantify the benefits or, conversely, harm the new device is delivering until after it has been adopted in mainstream use.

It is also important to note, however, that apart from the anomaly of the LMA, as a specialty anaesthetists do seem to delay widely adopting new airway devices in a timely fashion. This, in itself, has consequences. A little anecdote to ponder: one night in December 1799, George Washington developed a severe sore throat, loss of voice, and difficulty breathing all consistent with acute epiglottitis. One of his three attending physicians suggested performing a tracheostomy to relieve his airway obstruction but was dismissed by his peers. They were less familiar with the procedure and were hesitant to attempt it on a person of his stature. Instead, they phlebotomized him repeatedly accelerating his demise. ¹ No amount of style could have saved George Washington without the technology to support it. The lesson is that the technology was available and wasn't utilised – this may well have saved him. The parallel with the modern day is uncannily stark. Rather than resist advancements, anaesthetists should embrace them, and indeed, strive for leadership in technological innovation. The cadre are uniquely positioned to truly understand airway management and need to collaborate with industry about their specific requirements and objectives. Anaesthetists should be vociferous about demanding evidence based medicine to determine the better performing airway devices and then these can be rolled out across the country in a co-ordinated fashion. With widespread adoption of new airway technologies, is it really that outlandish to envisage a scenario where the trusty Macintosh laryngoscope becomes a curious antiquity for the anaesthetist of the future? I think not.



Dr Kimberley Hodge

ST5, Military Trainee

UPDATE: DAS Intubation Guidelines Training Material

A suite of open access training materials has been produced to promote teaching and dissemination of the revised guidelines for the management of unanticipated difficult intubation. We hope that they will make it easy for Airway Leads and others who are interested in the guidelines to give a presentation or run a workshop. DAS Professor Chris Frerk has created a PowerPoint presentation with slides illustrating the key points of plans A-D and very brief presenter notes; this can be adapted according to the needs of the session and the style of the presenter.

Intubation through a SAD and surgical cricothyroidotomy are techniques which are not part of the everyday practice of most anaesthetists, but these can be rehearsed using low fidelity simulation.

The DAS scalpel cricothyroidotomy techniques are described very precisely in the guidelines and are designed to be taught as such. Ideally all UK anaesthetists would learn (or teach) the same method each and every time so that teaching would be consistent and learning would be reinforced with repetition. The detail of the scalpel technique is important but it is difficult to convey accurately in writing or with two dimensional diagrams. A video and illustrated action cards have been developed to support workshop teaching.

There is also an at a glance view summarising the features of available teaching models for cricothyroidotomy.

www.das.uk.com/cricothyroidotomy_trainer_review

A video of intubation via SAD is in development.

The material can be downloaded from the DAS website soon.

Viki Mitchell

Chair of the DAS Guidelines Implementation Group

DAS has been at the forefront of improving airway management in the UK over the last 20 years by influencing individual working practitioners. The Society has held annual meetings since 1995. Attendance has grown from about 100 at the early meetings to 500-600 delegates. Just like every year, DAS ASM 2017 will be full of educational workshops and presentations! No doubt all anaesthetists are specialists in airway management; however, with the ever-increasing amounts of technology and equipment available, there will be some degree of sub-specialisation and expertise necessary, or is it? We will witness a debate on that at the meeting.

As anaesthetists, all of us have been caught, more than once, in circumstances where we have had to deviate from the norm, improvise, invent and extemporise. This is on top of feeling out of one's depth whilst appearing calm and when all eyes are on you expecting some kind of magic! We all know that it was not the first and would not be the last time! It is difficult to predict how different people will behave under extreme pressures. This year we have talks on human and psychological factor highlighting pitfalls in airway management.

Some session in DAS ASM 2017 will be about airway management in these special circumstances. The focus will be on learning from experiences of others and their management techniques, and at the same time stimulating interesting discussion. This will provide an excellent overview of transferrable skills.

The starting point for any airway management is an accurate assessment of the patient and identifying any current and potential causes of airway compromise. This allows the provider to select the appropriate devices and approach to managing the airway. Special circumstances such as trauma, paediatric or obstetric airway will all require strategic and creative planning.

Our natural instinct as current clinicians is to follow national or international guidelines. Some sessions at ASM 2017 look at developing and standardising further airway related guidelines. There will be times when either they need to be amalgamated or modified according to the specific needs of the situation. There will be talks that will certainly explore that and keep you glued to your seats.

Hence, they say, anaesthetics is as much an art as it is a science.



Sabeen Khan

Airway Fellow

St Georges University Hospital

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Correspondence

A SHOUT airway risk tool for use post anterior neck surgery

Dear President, Editors and DAS members,

I witnessed my first post-surgical critical airway emergency during a Saturday afternoon on-call in late 2013. A morning waiting-list initiative had been running in a parallel theatre and a female in her 30s underwent elective anterior cervical neck decompression. Later, the consultant surgeon was on a post-operative ward round when he discovered his patient *in extremis*.

Ward nurses and junior surgical doctors had reviewed and reassured the patient during an initial three hours post-operatively. The patient had had a raised respiratory rate and could not swallow; symptoms attributed during that period to acute anxiety and surgical pain. No-one considered the possibility of a post-surgical anterior neck haematoma (ANH) in their differential diagnosis. It later became apparent that this was what the patient had suffered.

I can still picture now the patient's face as she was wheeled back into the anaesthetic room, cyanotic, stridulous and adopting a tripod posture that I had only ever read about in paediatric textbooks. Owing to the skill and composure of the two anaesthetic consultants and surgeon on duty, the patient made a full pre-morbid recovery, albeit with some scarring. The more likely outcome as she re-entered the anaesthetic room that afternoon seemed death.

The root cause analysis that followed the incident found that a major educational deficit had contributed to the late identification of ANH at the bedside. The educational deficit was multi-faceted: -

- ANH is a **rare** complication (0.2-1.9%) of anterior neck surgery. In a specialist institution performing approximately 60 such surgeries per annum the last true ANH had occurred five years previously
- Frequent rotation of surgical juniors and nursing staff meant **variable clinical awareness** at the bedside. The most recent ANH would have occurred a statistical 10 SHO rotations previously
- Initial **symptoms may overlap** with common post-surgical symptoms
- Non-airway-minded clinicians perceive 'airway symptoms' to mean **cyano-sis and/or stridor**, both of which **develop late** in ANH
- ANH can result in rapid airway deterioration for direct (external airway compression) and indirect (impaired venous drainage from head and neck) reasons. This results in a **time-critical airway emergency**
- **Lack of** a clear senior **escalation pathway**

The analysis identified a requirement to provide a teaching tool that could embed awareness and knowledge, and provide a clear pathway of escalation for successive rotations of junior doctors and nurses. I performed a literature search to verify the most commonly presenting features of ANH. The majority of this information was contained within case reports. There were five recurring themes:

- **Oesophageal symptoms** such as dysphagia and drooling
- **Respiratory symptoms** such as tachypnoea and dyspnoea were frequently cited, with stridor and cyanosis occurring very late
- **CNS symptoms** such as restlessness, agitation and anxiety
- Anterior neck **swelling**
- **Hoarseness** or change in voice quality

I created the “SHOUT Airway Risk Tool”, so named to highlight that in ANH the airway is at risk.

SHOUT AIRWAY RISK TOOL	
This patient has had anterior neck surgery. Their airway may be at risk.	
S	Swelling of Neck <i>or</i> Stridor
H	Hoarseness <i>or</i> Voice Changes
O	Oesophageal discomfort: Swallowing Difficulty <i>or</i> Drooling
U	Unusual behaviour <i>or</i> Agitation
T	Tachypnoea <i>or</i> Difficulty Breathing
If any SHOUT symptoms present within 24 hours post op contact a Anaesthetic SpR immediately	

The SHOUT Airway Risk Tool was produced as a sticker, which at the National Hospital for Neurology and Neurosurgery we now place on observation charts for patients post anterior neck surgery. The routine referral to SHOUT when observations are performed and when patients are assessed creates a better awareness of ‘airway symptoms’ for the non-airway minded professional.

Simplicity of decision-making is an essential attribute of the SHOUT Airway Risk Tool. It specifies an escalation pathway: if any SHOUT symptoms present within 24 hours post operatively, call an anaesthetist. If necessary the

anaesthetist will call the surgeon. A rapid anaesthetic assessment, ideally in conjunction with surgical colleagues, allows a timely decision to be reached: ‘watch and wait’ versus ‘explore in theatre’. The anaesthetist can hold airway plan discussions with surgeons and mobilise the theatre team as appropriate.

University College London Hospitals is rolling out the SHOUT Airway Risk Tool across the trust as part of a 2017 educational quality improvement initiative. Approximately 700 anterior neck surgeries are performed in the trust annually; as many as ten ANHs could develop during this period. It is anticipated that the routine use of the SHOUT Airway Risk Tool during patient observation and review will enhance bedside education and awareness of an otherwise rare, life threatening and time-critical complication of anterior neck surgery.

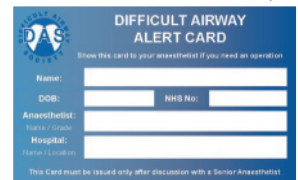
Bonnie Kyle, ST7 anaesthesia, North Central School Anaesthesia.

UPDATE– Airway Alert Card/ Database

It's been a little more than a year since we started piloting the DAS Difficult Airway Alert Card and Database project. I am pleased to announce that we have had a wonderful response from Airway Leads across the UK. As of now, we have received 71 entries for whom the DAS Alert Cards have been issued.

Currently 18 NHS Trusts are participating in the project and a few more are in the process of joining. The NHS Trusts currently participating are:

- East Kent University Hospitals NHS Foundation Trust
- Royal Surrey County Hospital, Guildford
- Royal Stoke University Hospital
- St. George's Healthcare NHS Trust, London
- Warrington and Halton Hospitals NHS Foundation Trust
- Mid Yorks NHS Trust
- Wrexham Maelor Hospital
- Heart of England Foundation Trust
- Taunton and Somerset NHS Foundation Trust
- Torbay and South Devon NHS Foundation Trust
- Plymouth Hospitals NHS Trust
- Hampshire Hospitals NHS Foundation Trust.
- The Shrewsbury and Telford Hospitals NHS Trust
- King's College Hospital NHS Foundation Trust
- Frimley Health NHS Foundation Trust
- Guy's and St. Thomas' Hospital NHS Foundation Trust, London
- King's College Hospital NHS Trust, London
- Royal Berkshire NHS Foundation Trust



DIFFICULT AIRWAY ALERT CARD

Show this card to your anaesthetist if you need an operation

Name:

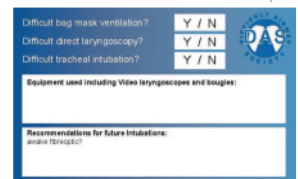
DOB: NHS No:

Anaesthetist:

Hospital:

Team / Location:

This Card must be issued only after discussion with a Senior Anaesthetist



Difficult bag mask ventilation? Y / N

Difficult direct laryngoscopy? Y / N

Difficult tracheal intubation? Y / N

Equipment used including Video laryngoscopes and bougies:

Recommendations for future intubations:
initial fiberoptic?

As this project involves collecting patient identifiable information, we have had to get Information Governance approval from the participating trusts. This has been a varied experience with some trusts readily approving the project while others subjecting the arrangements to rigorous scrutiny. The experience gained from this will help us to get the Information Governance approval easier in the future.

We will shortly analyse the data collected so far. This exercise will help us to tailor the questionnaire further and also make the process of data submission more user friendly. We hope to launch this project nationally in the next few months.

If you are an airway lead and would like to participate in the pilot project please contact us by emailing dad@das.uk.com



Dr Karthik Ponnusamy

DAS JOURNAL

DAS Members will soon be canvassed about their opinions on the DAS starting a new journal! This is an exciting proposition that could place DAS on par with several other specialist societies and also fill a void in the literature base, whilst allowing members an excellent outlet for their research, audit and quality improvement outputs. The journal could also serve as a forum to attract discussions and opinions through editorial and correspondence

Please watch this space for more details and if you have any views, please do send them to jaideep.pandit@dpag.ox.ac.uk, even before the survey opens.

Certification in the Management of the Altered Airway (Tracheostomy & Laryngectomy)

The 2014 NCEPOD report, "On the Right Trach", highlighted that over 25% of hospitals were caring for patients where staff had NO training in tracheostomies. It recommended mandatory training.

Rila Institute of Health Sciences started delivery of a 12 weeks Certification. An initial workshop day is followed by, at base, online learning via an eLearning platform. A logbook provides a practical skills framework, overseen by a mentor. Webinars are delivered by specialists e.g. SLTs, Physiotherapists, Nurse specialists. Passing an externally validated summative assessment leads to Certification. Participants require just 2 days out of base.

Accreditation: ENT UK (42 CPD credits); Difficult Airway Society; British Laryngological Association.

Audience: All grades of Nurses, Physios, SLTs, Surgeons (ENT/MaxFax), Anaesthetists, Intensivists, Community Nurses and anyone involved in Trachy care.

Next course: 9th January 2018: Venue: Rila, 73, Newman St, London W1T 3EJ

Website: <https://gpcourses.co/courses/certification-in-the-management-of-the-altered-airway-tracheostomy-laryngectomy/>

Professor Ram Dhillon

Rila Institute of Health Sciences

Consultant ENT Surgeon

tel: 020 7 580 7759

Email: ram.dhillon@rila.co.uk

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** Advertisement feature*

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BOOK REVIEW

The Headspace Guide to Meditation and Mindfulness

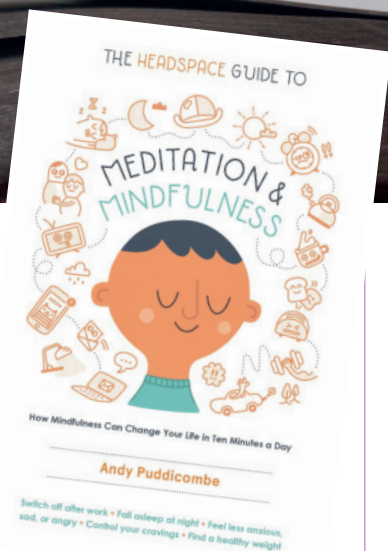
by Andy Puddicombe

Headspace is a meditation and mindfulness app claiming to have more than 6 million followers worldwide. The creator of this app, Andy Puddicombe, explains the tumultuous journey in this book in a smooth effortless fashion pausing to explain some of the core Buddhist principles; which form the base of this practice and the practical steps in achieving mental peace.

The authors' life story is far from ordinary. Andy Puddicombe left his sports science degree to learn meditation in a Tibetan monastery in the Himalayas only to return to London 10 years later as a trained ordain Monk, choosing to graduate in a degree in circus. He aims to demystify meditation for common people with busy lives through his book, which highlights the approach, practice and integration of mindfulness into everyday life through ten minutes of meditation.

The initial chapters describe the 'Headspace' approach to mindfulness. As life is cluttered with distractions, the author encourages the reader to find a quiet place and identify themes in the multitude of thoughts only to cast it aside, focussing attention on breathing or a visualisation. Practising the art of mindfulness and integrating it into our daily routine may help us live with a greater sense of freedom and ease.

The author uses a multitude of parallels in our day to day life to explain the fundamentals. We found a few concepts particularly appealing.



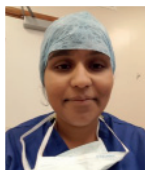
Blue sky concept: As explained by one of his Buddhist teachers - The blue sky is mental happiness or peace, which is always present within each individual at all times. Sometimes it gets clouded by thoughts. If we had the patience to let the clouds pass, we could feel its presence continuously.

The road: The principle here is to imagine ourselves sitting by the side of the road and simply observe the cars (thoughts) go past, resisting the temptation to follow or jump into one of them.

Wild horse: The author compares training of the mind to training a wild horse i.e. using a long noose to gently gain control over a period of time, without the mind realising it is being controlled.

The evidence base for mindfulness however remains limited and inconclusive. In 2016, Cochrane conducted a systematic review of evidence based mindfulness that concluded the same and suggested further clinical trials were required in this area. Despite the paucity of rigorous evidence, NICE guidelines for depression advocate mindfulness-based cognitive therapy for people who are currently well but have experienced multiple depressive episodes.

Overall, we think this is a thought provoking read that provides a gentle introduction to mindfulness explaining profound concepts wrapped in the form of a story. As doctors, we get so overwhelmed caring for others that sometimes we fail to recognise the detrimental effect it can have on our own mental and physical health. This book emphasises the importance of taking a fixed time out every day, so that we may feel happy, confident and relaxed; consequently, focusing our energy to do the best for our patients.



Dr. Ajit Walunj Dr Rochelle Velho
Good Hope Hospital, Sutton Coldfield

DAS PHOTOGRAPHY COMPETITION-2017



There was a very good response to the first ever photography competition run by DAS and we received several high quality pictures. The winning image taken by **Dr Debamoy Chatterjee** is on the front page of this edition . Few more selected images will appear in the upcoming editions.

TRAINEE ESSAY COMPETITION WINNERS

The DAS Trainee Essay Competition, introduced this year, was a great success. We had 15 entries from all over the country and I would really like to thank everyone who applied. The committee and judges including me were very impressed by the quality of the work submitted and all entries will be given a certificate of participation in recognition of their effort.

The winners are:

First Prize: Dr Kimberley Hodge, ST5 Military Trainee

Second Prize: Dr Bruce Young, ST3 Medway Maritime Hospital

Third Prize: Dr Benjamin Plumb, ST6, Royal United Hospitals, Bath

Many congratulations to the winners. I hope you enjoy Dr Hodge's interpretation of "**Technology and Airway: Real advances or style over substance?**" which is being published in this issue.

Dr Kanika Dua

Trainee representative



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