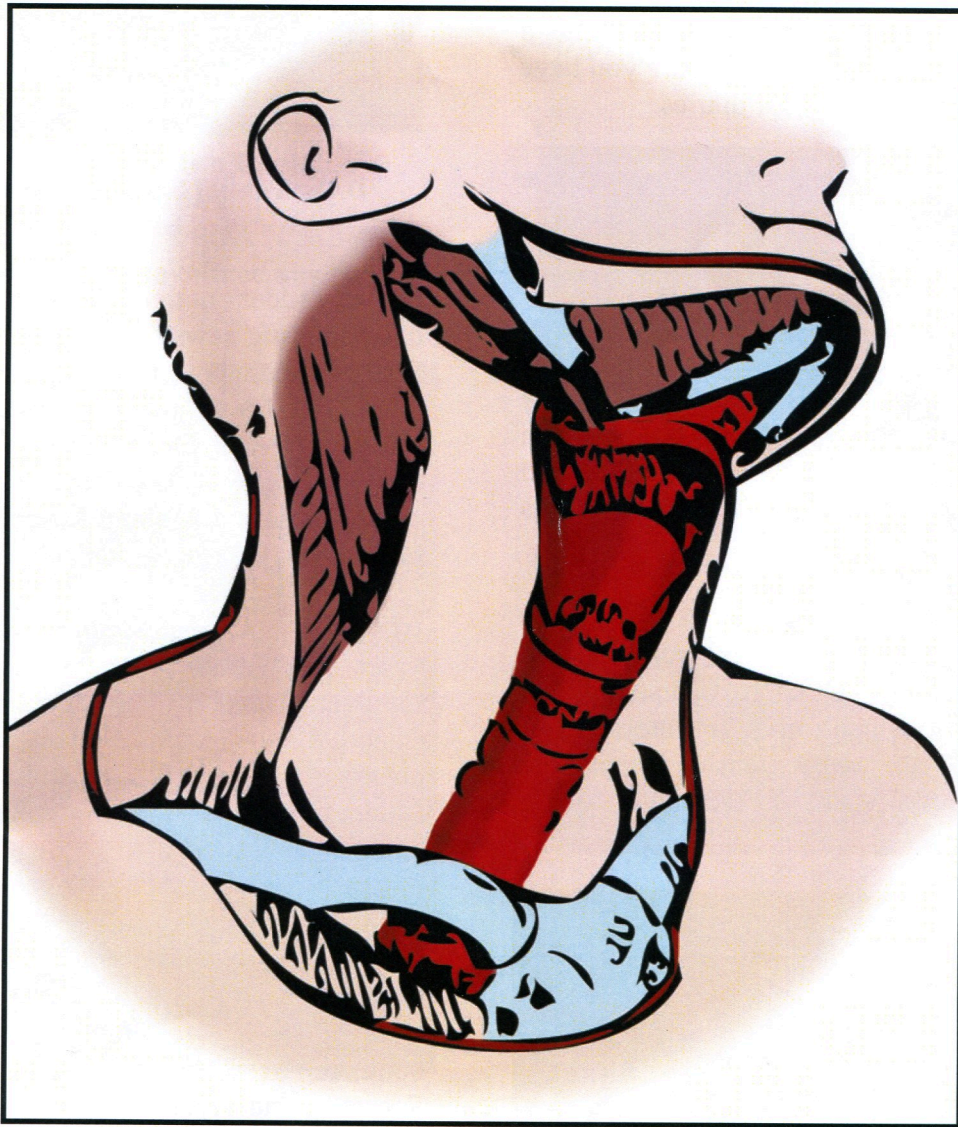


# DIFFICULT AIRWAY SOCIETY

JULY 2006 ISSUE: 13



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# News

It seems like only yesterday we were all enjoying the hospitality of Lille at the 10<sup>th</sup> Anniversary meeting of DAS and looking forward to our well deserved breaks over Christmas, and yet here we are some 6 months on, summer has finally arrived and I for one am already excited by the next DAS meeting in the beautiful city of Dublin. The meetings a bit earlier this year but I'm sure you have all put the dates in your diaries.

This years meeting takes place at the Burlington Hotel Dublin from October 4<sup>th</sup> – 6<sup>th</sup> 2006.

The speakers are from three continents, Europe, America and Africa and are all international experts. The programme looks fascinating with sessions on History, Retrosternal Thyroid management, Airway litigation, 'Myths and truths', and 'Core skills'.

On Wednesday October 4<sup>th</sup> extensive workshops will also be run in two streams. A Core Topic course and an Advanced course run by an international faculty, each with extensive experience in the equipment / technique being demonstrated.



## DAS Annual Scientific Meeting Lille

On a sadder note I have had some disappointing news from our treasurer Dr Chris Frerk who has had some queries from members and their accountants asking whether DAS subscriptions are allowable against tax. After exhausting enquiries with the Inland Revenue he has been told quite clearly 'NO'

Although our membership is fantastic value at £10.00 and the tax implication relatively small I don't understand this stance. As professionals involved daily in airway management a society dedicated to improve understanding and knowledge of difficult airway management is surely critical to our practise.

On a more positive note the society continues to grow at a rapid pace and Dr's Popat, Mushambi and Frerk continue in their roles as Chairman, Secretary and Treasurer.

Don't forget to book the dates for the 11<sup>th</sup> DAS Annual meeting in Dublin and for those who need some encouragement, the Gala Dinner takes place at the Guinness Storehouse – the story of where it all began. I can almost taste it!



DAS meeting, Lille

Dr Anil Patel

This newsletter was written by members of the Difficult Airway Society. The Opinions expressed are those of the individual members and do not represent necessarily the views of the society.

Any feed-back on this Newsletter, submissions for future editions or correspondence should be sent to;

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Lille city centre



## 10<sup>th</sup> Anniversary Annual Scientific Meeting at Grand Palais, Lille, France. November 2005

### Organisers:

Dr Adrian Pearce  
Dr Viki Mitchell  
Dr Mansukh Popat  
Dr Stuart Benham  
Dr Bernie Liban  
Dr Anil Patel  
Dr Veronique Crinquette



### Dr Adrian Pearce opens the meeting

Dr Adrian Pearce stated at the beginning of the meeting, that, as this was the 10<sup>th</sup> anniversary meeting the organisers had wanted a special meeting. All those that attended the meeting would agree this was achieved with a magnificent setting, venue and program.

Many of us delegates who had not been to Lille before, found it a beautiful, historic city, with cobble streets, good restaurants, a bustling nightlife and I am reliably informed by some female delegates, good shopping.

The Grand Palais was a great venue that held over 300 delegates very comfortably.

The first day started with the Mr Paul O'Flynn who made anatomy actually interesting! The take home message was if the surgeon and anaesthetist use the same language to describe the position of lesions it will further benefit the patient.

Next in the same session were Dr Mansukh Popat and Dr Anil Patel. While giving differing views of how to manage the difficult obstructed airway they showed that what was needed was experienced hands and a good plan B. The differences in their approach provided much of the discussion for the coffee break and much of the evening.

also stressed the importance of good communication between surgeon and anaesthetist.

This was followed by a champagne reception, which enabled the large number of posters, and trade stands to be viewed.



**Dr Nick Newton,  
Former Treasurer of DAS**

The next day started with free papers. This was followed by assessment of supraglottic airway devices by Dr Tim Cook, Dr Jim Murray, Professor David Ferson and Dr Jaideep Pandit. The overall message from this session was that with the increasing number of devices on the market no large-scale studies have evaluated all of them to find which is the best for the patient.



### **The treasurer saves money on packing**

The next session was dedicated to tracheostomy. First speaker was Dr Adrian Pearce who gave an over view of the history of tracheostomy that as usual from Dr Pearce was informative and very entertaining. Then we were lucky to have two surgeons Mr Stephen Watt-Smith and Mr Guri Sandhu address an anaesthetic meeting. They gave a comprehensive overview of tracheostomies not only in the elective situation but also as an emergency airway adjunct, their complications including benign subglottic lesions. They



### **Winners of the best free papers**

After an impressive lunch it was the guest lecture, LMA and Impact on

Difficult Airway Management by Professor David Ferson of the University of Texas. This was an informative talk by one of the pioneers of the LMA which finished with how useful the Intubating LMA is in space not only for intubating but moving patients.

The next session was Trauma Airway by Professor John McGill from Minnesota and Dr Michael Kristensen from Copenhagen. It highlighted the differences between the USA and Europe, and the anaesthetist and A&E physician in managing the airway in the trauma patient.



### **The youngest DAS member in Lille**

The final session covered paediatric and neonatal airway anaesthesia. This was from our hosts in Lille, Professor Pierre Fayoux, Professor Charles Hugo Marquette, Dr Bruno Marciniak and Dr Dominique Boisson-Bertrand. These lectures not only highlighted the differences between the adult and child, but also was a reminder of the difficulties the child poses the anaesthetist. As these lectures were all in English and of a very high standard the lecturers deserve a special thanks for their efforts.

After the general meeting, it was the Gala Annual Dinner in the grand settings of the Chamber of Commerce. We also had a welcome address from Monsieur Bruno Boudelle, President of the Lille

Metropole Chamber of Commerce and Industry.



### **Mr Bruno Boudelle Mayor & President of the Lille Metropole Chamber of Commerce**

The final day started with poster presentations. The final session was titled Airway Deaths. The first lecture was by Dr Richard Plummer. The consensus of those who attended this lecture was that it was the best of the whole meeting.

The final two lectures were the French and Danish experience by Professor Benhamou and Dr Kristensen respectively, which highlighted how rare airway deaths are, but how we still need to try and reduce them.



### **Guests at the Annual Dinner**

Dr Pearce was correct, this was a great meeting. If DAS 2006 lives up to the Lille meeting it is going to be a fantastic

meeting, and as word of the Lille meeting spreads, my tip is to book early for Dublin 2006!

Dr Kevin Hamilton  
SpR Royal National Throat, Nose and Ear Hospital



**Dr Veronique Crinquette, Mr Bruno Boudelle Mayor and Dr Mansukh Popat**



## **BUDAPEST WORKSHOP ON THE DIFFICULT AIRWAY**

Difficult Airway workshops have become a regular feature of airway management training in the UK. Several teaching hospitals as well as DGHs have set up well-recognised workshops to identify, plan a strategy and familiarise with equipment to manage a difficult airway.

The anaesthetic department at Wexham Park Hospital has regularly been conducting airway workshop for anaesthetic and A&E trainees for the last 3 years. This experience has encouraged

us to share our skills and train others. A group of Consultants from Wexham Park Hospital, Slough, Berkshire, along with theatre practitioners set out to Budapest on a cold wintry morning with the cheerful news that the temp in Budapest was a balmy  $-10^{\circ}\text{C}$  (compared to Moscow at  $-40^{\circ}\text{C}$ ). They went to conduct a workshop on the Difficult Airway at the invitation of Brigadier General Laslo Nagy of the Hungarian Difficult Airway Group at the Central Military Hospital in Budapest.



### **Budapest Airway Workshop**

This was a repeat of a very successful workshop conducted by the same group in 2005. The meeting started off with lectures on the anticipated and the unanticipated difficult airway along with a talk on different types of equipment available to get an anaesthetist out of this sticky situation!

The incidence of a nightmarish scenario of “cannot ventilate and cannot intubate” is only less than 0.01% of all anaesthetic cases but it can leave a devastating legacy on the doctor concerned and a catastrophic tragedy on the patient and relatives.

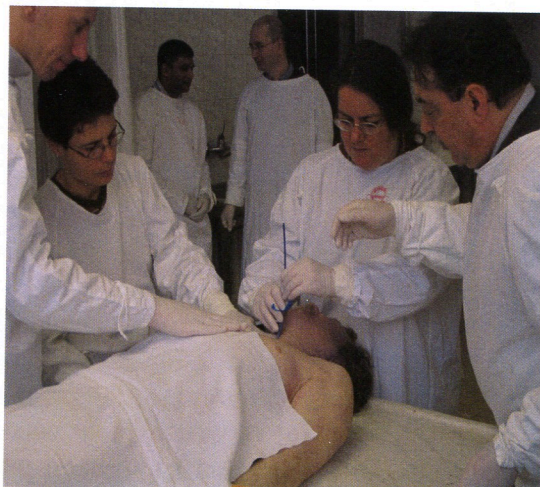
The keynote lecture was given by Dr Mansukh Popat, President of the Difficult Airway Society along with lectures by Dr Shaun Scott and Dr Roy Fernandes. After the lecture there were

lively case discussions on different scenarios. This was followed by a hands-on workshop on manikins where the delegates came to grips with different techniques on handling the airway. There were about 35 anaesthetists from all over Hungary who attended this workshop.

The delegates were extremely enthusiastic and very receptive, for most of them this was their first experience in handling a fibroscope. The quality of the equipment available made some of the faculty very envious, remembering the struggle to pass various committees in order to obtain even the most basic kit!!

On this occasion the unique feature was a hands-on workshop conducted the following day on cadavers at the Hungarian Forensic Institute. We believe this was the very first occasion when cadaver training has been used to master different airway control techniques.

by Barry Richards, Peter Norval and Chantell Etheridge.



### **Budapest Airway Workshop**

It was nice to be back to a cold London morning with the added joy of having the taxi breakdown in the Heathrow tunnel and Chantell having visions of being surrounded by police! Fortunately help was at hand and we got towed out till help arrived. At least it gave us an opportunity to photograph Concorde!!

Dr Rangu Iyer  
Consultant Anaesthetist  
Wexham Park Hospital



### **Budapest Airway Workshop**

The feedback from the delegates reflected a very high level of satisfaction with the workshop and requested that this be a regular annual feature.

The workshop was organised by Dr Jairaj Rangasami and the other members of the group were Drs Peter Thomas, P Olah, T Pataki, T Tamm & R Iyer, ably assisted



## Airway obstruction

George N<sup>1</sup>, Evans R<sup>2</sup>, Frerk C<sup>2</sup>

1 Specialist Registrar, 2 Consultant Anaesthetist,

Northampton General Hospital.

A 70-year-old female, presented with stridor and respiratory distress. She had bilateral vocal cord palsy of unknown aetiology.

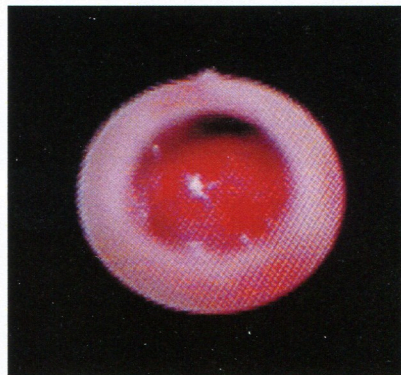
Six years previously, she had neurosurgery and radiotherapy for cerebellar metastatic carcinoma of unknown primary origin. Four years later she developed carcinoma of the breast which was treated by surgery and radiotherapy. One month after the mastectomy she developed left vocal cord palsy for which medialisation was done and later developed right vocal cord palsy which spontaneously recovered. While investigating this, an enlarged neck node was identified and biopsied which revealed a metastatic clear cell carcinoma, which was probably renal or gynaecological in origin. A review of her brain and neck node biopsy results showed similarities and suggested that the primary was probably originating from her thyroid gland but the patient refused further investigations.

Her chest X ray was normal and her previous anaesthetic charts (last GA 4 months previously), revealed uneventful anaesthetics with grade 1 laryngoscopy.

On examination, she had an inspiratory stridor with minimal air entry on auscultation. Airway assessment revealed a Mallampatti score of 1, Wilson A and a thyromental distance greater than 3 fingers. Oxygen saturations were 88% on air and 99% on 8 litres of oxygen. Oxygen was changed for heliox, which maintained the saturations above 90%. Flexible nasoendoscopy showed a fixed right vocal cord at the midline and left vocal cord was paramedian. A diagnosis of stridor secondary to bilateral vocal cord palsy was made and a tracheostomy was planned.

She was anaesthetized by inhalational induction with sevoflurane in oxygen with the ENT surgeons scrubbed up. Laryngoscopy grade was 1

and a size 6.0 cuffed microlaryngeal tube (MLT) passed easily through the cords but there was obstruction to passage of the tube below the cords. The depth of anaesthesia was increased and a size 5.0 cuffed MLT was passed with a lot of resistance to insertion. After intubation, fresh blood came up the endotracheal tube, which was suctioned out. She was then paralysed with atracurium and anaesthesia was maintained with sevoflurane in oxygen and fentanyl boluses. The thyroid isthmus was stuck to the trachea and was very difficult to dissect. The surgery was bloody, including into the trachea on making the tracheal opening. Only a size 4.0 tracheostomy tube could be inserted and there was a lot of resistance to ventilation through the tracheostomy tube. Fibreoptic examination through the tracheostomy showed a tumour in the posterior wall of trachea distal to the tip of the tracheostomy tube, which extended almost down to the carina.



View of the trachea distal to the tracheostomy tube

Nebulised adrenaline and steroids were given to treat any oedema, which may have contributed to the airway narrowing, and this had good immediate effect. Subsequently the tracheostomy tube was changed to a size 6.0 long tube so that it could pass beyond the tumour margins. Some improvement in ventilation was observed and the patient was woken up.

She was not considered to be a candidate for radiotherapy and was referred to palliative care.



## Lessons learnt:

1. Although the diagnosis was bilateral vocal cord palsy and previous anaesthetics were uneventful, one should be prepared for any eventuality.
2. After gas induction it is not necessarily safe to paralyse the patient just because the cords are visible.
3. This patient had irreversible airway obstruction probably due to infiltrating carcinoma of the thyroid gland and had the diagnosis been known, she would not have been treated by a tracheostomy.
4. Her symptoms did not improve significantly after the tracheostomy and there are cases of airway compromise, which are not amenable to any difficult airway management protocol.



### **Anonymous Letter**

I wonder if you would put this question out anonymously in your newsletter.

I was called to help in a situation where a middle grade had failed to intubate a category 1 LSCS for foetal distress. Waking up the mother was not an option. He put in an LMA and proceeded. When I got there surgery was in progress. The bag felt tight and when the mother started to breathe spontaneously, it felt like an improvement. I allowed her to breathe on her own and did not attempt any airway manoeuvres (although I am skilled at fiberoptic intubation). Oxygenation was maintained although we did need to use an FiO<sub>2</sub> of up to 1.0.

The questions are

1. Should I have re-paralysed the patient?
2. Should we have maintained cricoid pressure?

## **Reply to Case 2: DAS Newsletter 2005**

**Frohlich S, O'Sullivan E**  
**St. James's Hospital, Dublin, Ireland**

I read with interest your case report regarding Pyolaryngoceles, and the options for management of the airway (DAS Newsletter, Issue 12)

We recently encountered a patient, who, over a one-year period presented with airway obstruction on three separate occasions prior to eventual diagnosis of a pyolaryngocele. Each admission required emergency intubation, and considerable experience was gained from the management of this case.

As described, a laryngocele is an abnormal dilation of the laryngeal saccule, producing an air sac that communicates with the laryngeal ventricle. Obstruction of the neck of the laryngocele can cause mucus retention and infection resulting in a pyolaryngocele. The incidence is estimated at 1 in 2.5 million, of which 10% become infected. They often present as acute airway obstruction. Significant supraglottic swelling exists which with an inflamed supraglottic neck mass can make standard intubation techniques very difficult. Additionally, diagnosis on first presentation is challenging, and without a definite diagnosis, control of the airway needs to be assumed rapidly.

A 50-year-old male presented to the Emergency department with a 24-hour history of worsening sore throat, hoarseness and now severe inspiratory stridor. Nasal fiberoptic laryngoscopy revealed diffuse supraglottic swelling with a very narrow glottic opening. He underwent gas induction with sevoflurane and was successfully intubated with a size 6 endotracheal tube via direct laryngoscopy. Mild oedema of the epiglottis and severely oedematous aryepiglottic and vestibular folds were seen. A diagnosis of epiglottitis was made and treatment begun. Post extubation examination suggested a resolution of all inflammation. Ten months later the same patient presented to the Emergency Department with a five-day history of

worsening hoarseness, respiratory difficulty and inspiratory stridor. Nasal fiberoptic laryngoscopy revealed a large cyst like left supraglottic swelling medial to the false cords. The vocal cords were almost completely obscured, and as a result it was decided to perform an awake fiberoptic nasal intubation. This was uneventful, and a Size 5.5 nasal tube was passed over the scope, with no trauma to the swelling.

The swelling was incised and drained by the ENT surgeons under direct vision and a large volume of purulent fluid released. Post decompression anatomy appeared normal.

One month later the patient again presented to the Emergency Department complaining of shortness of breath, cough and an internal "neck discomfort". Laryngoscopy demonstrated a cystic swelling at the base of the epiglottis. Contrast CT showed a 2x3cm left neck lesion commencing below the piriform fossa and extending inferiorly to the level of the vocal cords with an air-fluid level and enhancing rim. The lesion was excised three days later via an external approach, with intubation once again by an awake fiberoptic technique. Histological examination revealed a pyolaryngocele. Follow up was uneventful.

The first presentation of a laryngocele or pyolaryngocele is often with acute airway obstruction. At this stage the diagnosis is rarely known, so the unfortunate anaesthetist is presented with a critical airway obstruction of unknown origin. Therefore, a critical issue is that a definitive airway is safely secured as soon as possible. The assistance of the ENT Services should be sought immediately. If sufficiently stable, the patient should be transferred immediately to the operating theatre, and facilities made available for an urgent surgical tracheostomy. Our preferred method of intubation is an awake fiberoptic method, for the following reasons:

- 1) The patient can be kept sitting up, facilitating easy respiratory effort.
- 2) The patients own airway and respirations are maintained. Sedation should always be avoided in these patients.

- 3) The fiberoptic scope can be negotiated easily around an obstructing swelling.
- 4) The glottic structures can be better visualized overall.
- 5) The risk of perforation of the swelling is reduced, thereby reducing the risk of aspiration of purulent materials.
- 6) In these patients we use a "spray-as-you-go" technique to anaesthetise the airway and we have not seen any adverse complications with this e.g. laryngospasm
- 7) A record of the intubation can be kept for medico-legal and teaching purposes.

Though no study has been done regarding intubation techniques for patients with laryngoceles, we feel the safest and most effective method of establishing a definitive airway is by an awake fiberoptic intubation. If this fails transtracheal needle and jet ventilation, or awake tracheostomy would both be reasonable options.

Ideally fiberoptic intubation equipment should be available in the emergency departments, and all anaesthetists be experienced in its use.



## **The Laryngeal Mask Airway, Transtracheal Jet Ventilation and Microlaryngeal Surgery**

**GA Matthews\*, SMK Nash\* & SC Toynton<sup>+</sup>  
Dept of \*Anaesthesia and <sup>+</sup>Otorhinolaryngology,  
Derriford Hospital, Plymouth, Devon**

A 45-year-old asthmatic woman presented to the ENT clinic giving a six-month history of a progressively deteriorating hoarse voice. Nasendoscopy revealed multiple mature granulomata of the vocal cords. Microlaryngoscopy under general anaesthesia was booked. The initial procedure was performed with a laser compatible size 6.0 cuffed endotracheal tube. Laryngoscopy was noted to be difficult, documented grade II, necessitating both cricoid pressure, a bougie

and a long bladed laryngoscope. Anaesthesia was complicated, both at induction and at extubation, by profound bronchospasm and desaturation. The anatomical difficulties noted at induction and the microlaryngeal tube prohibited effective laryngoscopy, and the surgical procedure was abandoned without successful treatment.

Further surgical options including pharyngostomy and laryngofissure were discussed. Following communication between surgeon and anaesthetist it was decided to re-attempt microlaryngoscopy using transtracheal jet ventilation. The rationale for this alternative approach was explained to the patient and consent was obtained.

Anaesthesia was induced with remifentanyl  $0.25\mu\text{g kg}^{-1}\text{min}^{-1}$  and propofol  $10\text{mg kg}^{-1}\text{hr}^{-1}$  without bolus, to maintain spontaneous respiration. Laryngoscopy was performed which confirmed an anterior larynx and grade IIb modified Cormack and Lehane score. Lignocaine 4% (2ml) was applied to the cords. A laryngeal mask airway (LMA) was inserted and via the LMA, a flexible fiberoptic endoscope was positioned, beyond the cords to view the trachea. A Ravussin 13g jet ventilation cannula was placed through the cricothyroid membrane into the trachea under direct vision. A positive  $\text{CO}_2$  trace was confirmed. A muscle relaxant was administered, controlled ventilation via the LMA effected, and the patient transferred to the operating theatre.

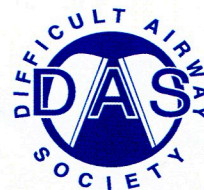
The patient was placed in a supine position on the operating table and then transtracheal jet ventilation was commenced, firstly with the LMA in situ and then with the LMA removed. The absence of a supraglottic airway device and the independent subglottic ventilation allowed plenty of time to position the suspension laryngoscope optimally, despite the difficult anatomy. Cricoid pressure was still required to obtain an adequate view. Surgery proceeded uneventfully; using microlaryngoscopy instruments rather than the KTP laser. At the end of the procedure the LMA was replaced, facilitating a smooth recovery profile, and no bronchospasm occurred. The transtracheal catheter was removed in recovery when the patient was awake and exhibiting no respiratory difficulties. At clinic review the patient was delighted with the process and outcome.

A note of caution: Although it is widely accepted that there are risks of baro-trauma with the transtracheal ventilation technique, these may be minimised by equipment design and safe anaesthetic practice. It has previously been assumed that the risks of combustion with laser microlaryngeal surgery and transtracheal jet ventilation are negligible, primarily due to dissipation of the laser over the distance involved. Indeed in this case laser microlaryngeal surgery was considered a possibility. In a recent case reported in *Anaesthesia and Analgesia* (1), a Teflon coated transtracheal catheter was perforated by laser strike and then, subsequent to minimal migration, caused the development of subcutaneous emphysema. Vigilance remains paramount.

This case highlights the exposure and ventilatory-independence advantages of transtracheal ventilation for difficult microlaryngeal procedures; the safe positioning of a transtracheal catheter using fiberoptic direct vision and capnography; the possibility of maintenance of spontaneous respiration with intravenous induction; and the smooth recovery profile of the LMA in ENT procedures.

#### References

1. Leeman B, Heidegger T, Grossenbacher R, et al. A severe complication after laser induced damage to a transtracheal catheter during endoscopic laryngeal surgery. *Anesth Analg* 2004; 98:1807-1808



## An Unusual Cause of Difficult Intubation

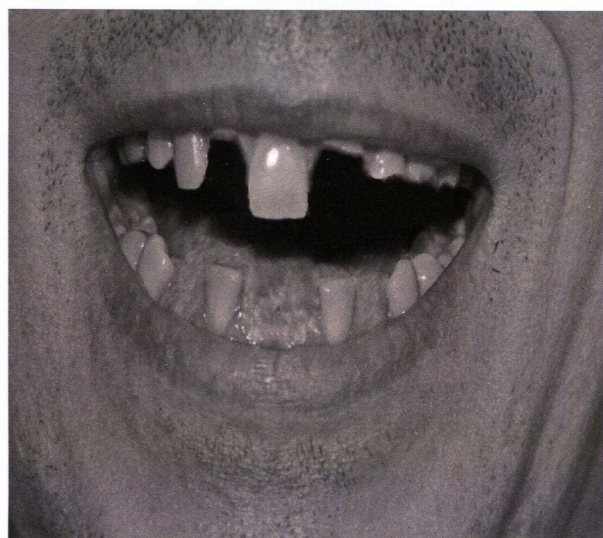
**MJ Allen**  
**Dept of Anaesthesia**  
**Moorfields Eye Hospital London**

A 56-year-old man presented to our hospital with a rhegmatogenous macula on retinal detachment requiring an urgent vitrectomy. In view of the

fact that the gentleman had a high body mass index, I opted to electively intubate him for the procedure.

Following an uneventful induction using propofol, remifentanyl and rocuronium, the patient was hand ventilated with a standard adult facemask for approximately 3 minutes. On attempting to open his mouth in order to perform laryngoscopy, I noted that his jaw was locked firmly shut, a feature which at the time closely resembled trismus. However, on closer inspection of the patient's mouth it soon became apparent that his isolated upper incisor had become trapped within a large gap in his lower dentition. After very careful manipulation I was able to free his upper incisor allowing me to perform laryngoscopy and intubate. The case proceeded without any further problems and in recovery there was no apparent damage to the gentleman's teeth.

This case highlights the importance of a careful evaluation of a patient's dentition prior to induction of anaesthesia. During the anaesthetic assessment, it was elicited that this patient had a set of partial dentures, but the exact condition and position of his remaining teeth did not become apparent until this problem arose. This incident might have been prevented if the patient's native teeth were examined more carefully prior to the induction of anaesthesia. A prophylactic bite block or oropharyngeal airway could then have been used to overcome such an unusual problem.



**Illustrative copy of the patient's dental state**

Please note that this is not a photograph of the patient in question, but a modified photo of my own teeth simply to illustrate the case!



## **Gas Induction**

**Khan S<sup>1</sup>, Evans R<sup>2</sup>, Frerk C<sup>2</sup>**

**1 Specialist Registrar, 2 Consultant Anaesthetist,  
Northampton General Hospital.**

### **Introduction:**

General anaesthesia with gas induction is the preferred choice of anaesthetic technique in certain situations of upper airway obstruction where awake fiberoptic intubation may precipitate complete airway obstruction. We present two cases of airway obstruction at the glottic and infraglottic level necessitating gas inductions.

### **Case 1**

A 16-year-old male was posted for laser ablation of post intubation granuloma to the vocal cords. He initially presented to Accident and Emergency 4 months ago following a road traffic accident. He had a low level of consciousness and was therefore intubated and transferred to a neurosurgical centre for the management of his head injury. He was later transferred back to the DGH, extubated, with an improved GCS. He then suffered a respiratory arrest five days after readmission, which was treated by intubation and ventilation. His condition improved and he was extubated the next day. But within few hours he became stridulous and breathless. An ENT review revealed floppy swollen vocal cords with restricted movements and granulomas narrowing the airway. The patient was reintubated and a percutaneous tracheostomy was performed by the ENT surgeons. His condition improved, he self decannulated and was discharged home within a month.

He was readmitted two months after discharge with increasing shortness of breath and biphasic stridor. CT neck showed narrowing at the glottic level with no supra-glottic or infra-glottic narrowing and ENT examination revealed a dislocated right arytenoid. The patient was then scheduled for microlaryngoscopy and laser arytenoidectomy.

He was anaesthetized by a gas induction and the airway was secured with a size 4mm microlaryngeal tube (MLT) following a failed attempt with a size 6 cuffed MLT. But the anaesthetic notes did not mention that the tracheal tube was uncuffed. The laryngoscopy view was grade 2 but the anaesthetic chart did not mention whether the 4mm MLT was cuffed or uncuffed)

On this admission, he was rescheduled for laser ablation of vocal cord granulomas. Preoperative ENT examination revealed fixed abducted vocal cords and dislocated right arytenoid. The patient was stridulous in the preoperative period. His saturations were 98% on air. He was able to speak with great difficulty.

The management plan was to intubate the patient and perform a tracheostomy electively. Gas induction was performed using sevoflurane in oxygen. It was a very slow induction and was extremely difficult to increase the depth of anaesthesia. The patient was stridulous throughout induction.

As the anaesthesia was deepened it became extremely difficult to maintain his airway, hence a Guedel airway was placed and CPAP maintained. Laryngoscopy was attempted which was noted to be grade 2 and an attempt to railroad size 4 cuffed MLT over a paediatric bougie was unsuccessful and the patient coughed. Hence the patient was oxygenated and anaesthesia deepened with sevoflurane. A second attempt was made using an uncuffed size 4 MLT which was railroaded successfully. Tracheostomy was performed using size 6 tracheostomy tube. It was noted that the glottis was narrowed at the level of the cords extending 2-3 mm into the subglottic region with webbing of the right arytenoid. The rest of the surgery proceeded uneventfully.

The tracheostomy tube was changed and having trained the patient and his parents in tracheostomy care he was discharged home. Further management will comprise of repeated laser ablations of the granulomas at a tertiary centre.

#### Lessons learnt:

Gas induction is difficult in the presence of airway obstruction and one may need to wait a long time in order to achieve an adequate depth of anaesthesia to attempt any airway manipulation. This patient has already had anaesthesia for laser ablation of the cords and it was anticipated that he would require several further anaesthetics for similar procedures. Hence careful documentation of the anaesthetic technique including the endotracheal tube types and size is of great significance for future management.



#### AIMS OF THE SOCIETY

- 1] The advancement of public education in the science and practice of the management of patients with difficult or unusual airway problems, by the conduct of courses, lectures, demonstrations and by ensuring that due attention is paid to airway management techniques in the training curricula of medical and paramedical practitioners*
- 2] To promote research and the development of new techniques in dealing with airway problems, and to publish the useful results of that research.*

## THURSDAY 5<sup>TH</sup> OCTOBER 2006

8:30 - 9:00 Registration

9:00 - 9:15 Welcome by Dr Ellen O'Sullivan

### 9:15 - 10:45 Session 1 - THE RETROSTERNAL THYROID Chair - Prof. George Shorten

9:15 - 9:40 **A Surgical Perspective**  
9:40 - 10:00 **Anaesthetic Aspects of Management**  
Dr Peter Vaughan (Dublin)

10:00 - 10:30 **Debate:**  
**Large thyroid goitres should always be regarded as potentially difficult airways.**  
Proposed by: Dr Adrian Pearce (London, UK)  
Opposed by: Professor Mike James (Cape Town, South Africa)

10:30 - 10:45 **Questions and Discussion**

**10:45 - 11:15 TEA/COFFEE**

### 11:15 - 12:45 Session 2 - GREAT MOMENTS IN AIRWAY HISTORY Chair - Dr Dermot Kelly

11:15 - 11:45 **History of Endotracheal Intubation**  
Professor Kathryn E. McGoldrick (New York, USA)

11:45 - 12:15 **Development of Supraglottic Airway Devices**  
Dr Archie Brain (UK)

12:15 - 12:45 **Magill - The Inventor**  
Dr David Wilkinson (London, UK)

12:45 - 13:00 **Questions and Discussion**

**13:00 - 2:00 LUNCH**

### 14:00 - 15:30 Session 3 - INVITED PAPERS Chair - Dr Peter Charters

**15:30 - 16:00 TEA/COFFEE**

### 16:00 - 17:00 Session 4 - AIRWAY MANAGEMENT GUIDELINES Chair - Dr Mansukh Popat

16:00 - 16:20 **In Defence of the ASA Difficult Airway Guidelines**  
Professor William Rosenblatt (Yale, USA)

16:20 - 16:40 **In Defence of the DAS Airway Guidelines**  
Dr John Henderson (Glasgow, Scotland)

16:45 - 17:00 **Questions and Discussion**

### 17:00 - 18:00 ANNUAL GENERAL MEETING

20:00 **Gala Dinner - Guinness Storehouse**

9:15 - 10:45      **Session 5 - FREE PAPERS**      **Chair - Dr Mark Halligan**

**10:45 - 11:15      TEA/COFFEE**

11:15 -12.45      **Session 6 – ‘Myths and Truths’      Chair – Prof.Denis Moriarty**

11:15 - 11:35      **Rapid Sequence Induction – The Essentials**

Dr Richard Vanner (Gloucester, UK)

11:35 - 11:55      **Extubation – The Most Critical Airway Event**

Dr Ralph Vaughan (Cardiff, Wales)

11:55 - 12:15      **Percutaneous tracheostomy – A Simple Bed-side Procedure**

Dr Carl Fagan (Dublin)

12:15 - 12:30      **Trauma Scenarios – Airway Management Made Easy**

Dr Eamon McCoy (Belfast, NI)

12:30 - 12:45      **Questions and Discussion**

**12:45 - 14:00      LUNCH**

14:00 - 14:45      **Session 7 - AIRWAY MANAGEMENT LITIGATION**      **Chair – Prof.Howard Fee**

14:00 - 14:20      **North American Experience**

Professor William Rosenblatt (Yale, USA)

14:20 - 14:40      **Personal UK Perspective**

Dr David Bogod (Nottingham, UK)

14:40 - 15:00      **Defence Union Experience**

Professor Anthony J Cunningham (Dublin)

15:00 - 15:15      **Questions and Discussion**

15:15 - 16:00      **Session 8 – DEBATES – Core Skills**      **Chair - Dr Jim Murray**

15:15 - 15:45      **'Cricothyrotomy is not a core skill'**

Proposed by      Professor Alastair Chambers (Aberdeen, Scotland)

Opposed by      Dr Tim Cook (Bath, UK)

15:45 - 16:15      **' Fiberoptic Intubation is a core skill for a consultant anaesthetist'**

Proposed by      Dr Nick Woodall (Norwich, UK)

Opposed by      Dr Ian Calder (London, UK)

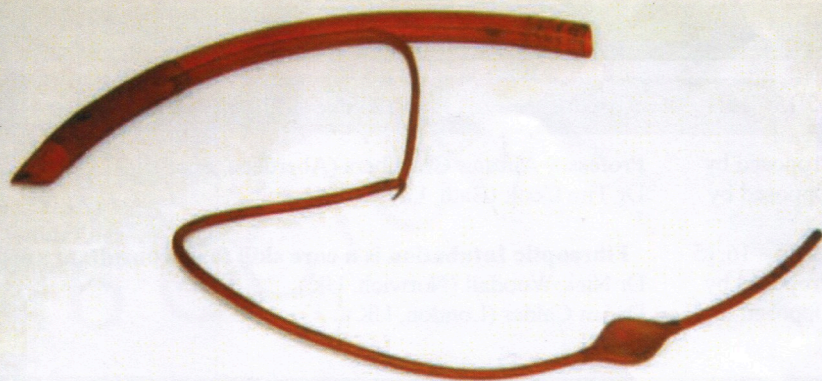
16:15      **PRESENTATION OF THE PRIZE FOR FREE PAPERS**

**CLOSE OF MEETING**



# Annual Meeting

Dublin 4-6 October 2006



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