BOAS
British Ophthalmic Anaesthesia Society

# OPHTHALMIC ANAESTHESIA NEWS

## The Newsletter of the British Ophthalmic Anaesthesia Society
## Autumn 2006

## BOAS COUNCIL



**Please send articles, letters and newsworthy items to stephen.mather@doctors.org.uk**

**web: www.boas.org**

Welcome to this autumn edition of *Ophthalmic Anaesthesia News.* You will see that this edition has a slightly different look and this is because the newsletter has a new editorial team. Chandra Kumar has, after editing the Newsletter since its inception, handed over the editorial reins to Steve Mather and Monica Hardwick.

We hope to build on the solid foundation laid by Chandra, and we hope that the Newsletter will go from strength to strength. For this to happen, we need the input of our members. Please let us have your news and views – after all, it is a newsletter. Anything which you think may be of interest to your colleagues in ophthalmic anaesthesia. It does not have to be an article - it can just be your views on a subject. If you want to seek the opinions of your

colleagues, you can do so through these pages. However, if you do have an article or a case report, please let us have these too, as it adds weight to the Newslettter, and is interesting to your colleagues. I am assured by Chandra, that publication here does not necessarily preclude you from writing up your work for a major scientific journal.

Don't forget that *Ophthalmic Anaesthesia News* is a "coffee table journal". Leave it out on the table in theatre or in your department. Even non-members read it. In my hospital it is popular among the nurses and other theatre staff.
BOAS is a specialist society, recognised as such by the Association of Anaesthetists of Great Britain and Ireland, and the Royal College of Anaesthetists. BOAS was able to advise both these bodies when making their response to the attempt by BUPA to introduce American-style managed care to Britain. Please help to maintain our specialist status by contributing to the Newsletter.

Study leave is a bit of an issue at the moment with Trusts trying to save money, so to make sure you are not disappointed, book your leave now for the 2007 annual meeting which will be held in York on the 21 and 22 June. Reminding you all in the Spring editorial will probably be too late!

SM

**BOAS 2007 will be held in the beautiful and ancient city of York. The organisers are well advanced with preparations for the meeting which will be held in The Royal York Hotel. within walking distance of the historic sights and sounds of York such as the Minster, the Shambles and the city walls.**

## A few simple words from the President of BOAS
## Ken Barber

The NHS is in the news again today. Hospital league tables are hot off the press. Worcester is rated 'Weak' and 'Fair', just above Moorfields Eye Hospital, which is rated 'weak' and 'excellent', which means that 'Fair' must be in fact better than 'Excellent'. Well if the Healthcare commission say so, it must be right. Whatever happened to the star system? That was much easier to follow, but what it actually meant I never knew.

We have also had MMC, with all its wonderful foibles. Write in 199 words on subjects such as: why you are a really nice person, or which is your favourite TV program. The best answers are on the net and MMC have twigged that the last 300 applicants have identical answers.

I could go on and mention the BUPA network, and the shift of NHS hernia operations to the community, post redundancy planning, and the possible introduction of Milliman guidelines. The list seems endless, and medicine seems to become more and more unrecognisable.

It is important however to remember, and retain the professional aspects of our lives, despite all the buffoonery that seems to surround us. Although BOAS is a small society, it does represent the profession in a number of ways. It has a scientific component, with successful conferences for the past seven years. It brings together national and international expertise on the field of ophthalmic anaesthesia, with the inevitable exchange of ideas both at the level of practical advice on techniques, but also an exchange of professional ideas regarding interaction with government policy or healthcare insurance groups. BOAS is also unique, in that it is a society of two specialities, it does bring together two otherwise disparate groups under one roof, Anaesthetists and Ophthalmologists.

One aspect that stands out above all in my opinion is the value of a visit to colleagues in another department, both in this country and abroad. We learn so much from seeing our colleagues 'in action', and we come away at the end of the day with a basket of good ideas to use in our own practice. The 'not so good ideas' we can leave behind. It's also valuable for the host department, as they inevitably question what they themselves do, and why. So why not plan a visit to another centre in 2007? It all counts for CPD!

## Meeting review

# BOAS Annual Scientific Meeting – 2006

Shashi Vohra

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What happens when a group of distinguished ophthalmic anaesthetists from two continents get together with equally renowned ophthalmologists? Well, there are no prizes for guessing that there would be exchange of innovative ideas with an aim to pave the way for a brighter future. We are of course referring to the 8th Annual Scientific Meeting of BOAS held in Birmingham on the 28th and 29th of June, 2006.

Following a very successful BOAS meeting held in 2002 at the Birmingham International Convention Centre with its state of the art facilities, this year saw the meeting return to The Second City once again. The Burlington Hotel provided the elegant accommodation, conference and dining facilities. The hotel is conveniently located at the heart of the city with easy access from all major roadways. Local tourist spots such as Jewellery Quarter and the refurbished historic Bullring Centre, provided an attractive get away for the accompanying persons.

The two day conference had all the ingredients essential for keeping about hundred delegates in their seats. The programme commenced on the 28th afternoon with a welcome address by **Mr Ken Barber**, the new president of the BOAS.

**Dr Robert Johnson** chaired the first session of the day where the delegates were taken '*Back to the Basics*'. A tour of the history of ophthalmic anaesthesia was expertly provided by **Dr Anthony Rubin**. The audience was transported to the times of 'Susrutha' and the dramatic events of 1884 when Carl Koller and Sigmund Freud laid the foundations of modern ophthalmic anaesthesia. We learnt that the 'New Age' techniques such as topical eye drops, sub-conjuctival infiltration and sub-Tenon injections, are rather old procedures. These have been reinvented, improved and modified for the present day surgical needs.

Talking of the present day needs, **Dr Steve Mather** explained the 'Why', 'How' and more importantly 'By Whom' of Preoperative Assessment of patients presenting for ophthalmic surgery. These are typically a high risk group of patients. They must have their risks quantified even though the surgery is perceived to be low risk. It is important to dissociate the biological age from physiological. Special consideration should be given to the Syndromic children. Dr Mather reminded us that there are some unanswered questions in relation to the management of peroperative hypertension and these need addressing.

**Dr Frances Forrest** then presented a talk about the evolving trends in the general anaesthesia for adult ophthalmic surgery with a particular

reference to the current practice at the Bristol Eye Hospital. The challenge of providing safe daycare anaesthesia for elderly patient presenting with multiple co-morbidities was highlighted. A review of desflurane and sevoflurane for use in ophthalmic anaesthesia was particularly interesting.

Following the tea break, the second session chaired by **Professor Chris Dodds** kicked off in style with an excellent account of Pacemakers. **Dr Teri Millane** clarified the differences between the 'Fixed', 'Demand', 'Rate-responsive' and 'Single & Dual chamber' pacemakers. The problems such as failure to sense and or capture, were explained. We were reminded that magnets do not universally convert a pacemaker to the fixed mode and that one must follow the manufacturer's alerts.

The lecture further lifted the veil of confusion surrounding several other pacemaker related issues. The old unipolar pacing wires are susceptible to electrical interference from the diathermy plate whereas the modern bipolar ones are relatively safer. It is wise to have back up of a pulse oximeter for monitoring the heart rate as the ECG rate meters can be misleading. Patients fitted with ICD are an unusual group and need a specialist's opinion. Biventricular pacers are usually trouble free unless bradycardia ensues. It was emphasized that during CPR the defibrillator paddles *must not* be placed over the pacing generator.

**Dr KL Kong** then gave a thought provoking talk on 'Anaphylaxis and Anaesthesia'. He reminded us that the incidence of these life threatening events is on the increase. The common offenders are antibiotics, neuromuscular blocking agents and latex. A high index of suspicion is required for a timely recognition and management of anaphylaxis. The treatment must be initiated without delay. 'ABC' remains the rule. Adrenaline with its mast cell inhibition and an increase in intracellular cyclic AMP is the key pharmacological agent. A referral to the immunologist for full investigations and clear documentation is a must to prevent recurrences. A demonstrable rise in the mast cell tryptase is considered to be diagnostic.

**Dr Steve Gayer** from Miami, Florida, then presented a literature review of 'Open Globe and Suxamethonium' a topic which interests every ophthalmologist and anaesthetist. The ocular hypertensive effects of suxamethonium and their modulation was discussed. Vitreous expulsion is a well known risk in patients with an open globe. Fortunately, over the last few years the surgical management of ophthalmic injuries has changed. These are no longer considered to be 'emergencies' as such. This, along with newer neuromuscular blocking agents and greater acceptance of regional anaesthesia allows for a more controlled approach. The new drug 'Sugammadex' may be an answer for the future. It has been shown to be effective for rapid and *early* reversal of rocuronium induced

neuromuscular blockade thus obviating the suxamethonium altogether.

The final session of the day was chaired by **Dr Monica Hardwick**. The points of discussion were: testicular implants, soft compressible rubber balls, air filled balloons and mercury or tungsten filled bags! Puzzled? Well, this was **Gary Fanning** from Sycamore, USA, delivering an entertaining and informative guest lecture on oculocompresion in his unique and inimitable style. This bewildering assortment of devices is used to control the intraocular pressure. In the absence of these devices, good old digital compression is acceptable as long as kneading is avoided. Injudicious or excessive use of oculocompression may result in corneal abrasions, corneal collapse, reduced retinal blood flow, oculocardiac reflex as well as dislocation of lens, especially those with weak zonules.

It is always a pleasure to listen to Dr Fanning and this year was no exception.
The academic part of the day closed with a lively discussion. A relaxed evening followed with some drinks. A sumptuous dinner was held at the Burlington Hotel where the conference hall was transformed into an elegant dining room.

**Thursday, 29th June, 2006**

The ophthalmic surgeons took centre stage on the second day of the conference. **Mr Graham Kirkby** chaired the first session, where intricacies of ophthalmic surgery were discussed by five eminent speakers.

**Professor Peter Shah** talked about 'The Demands of Modern Glaucoma Surgery' and discussed procedures such as trabeculectomy, bleb needling, anterior segment reconstruction, scleral transplant and management of chronic ocular hypotony. The phenomenon of 'Wipe Out' was explained. The adverse effects of pre-operative medications such as gingko biloba, aspirin, clopidogrel and B blocker eye drops were highlighted.

The complexities of corneal lamellar surgery were then presented in detail by **Mr Sunil Shah**. The days of penetrating keratoplasty appear to be numbered, thanks to the new sophisticated instruments. The strict surgical conditions required for these procedures have eased a little bit in the recent years and general anaesthesia will no longer be a prerequisite in the future.

**Mr Aiden Murray** explained the 'Challenges of Orbital Surgery'. The topics of discussion were: hypotensive anaesthesia, oculocardiac reflex, intracranial infection and post-operative haemorrhage. The new technique of endoscopic DCR is a welcome development for high risk patients as it can be done under local anaesthesia.

**Professor Philip Murray** and **Miss Saaeha Rauz** then delivered a joint presentation on the inflammatory eye

diseases. The challenge of management of these complex patients and the pathophysiology of the underlying systemic disorders was elucidated.

Following a coffee break, the meeting reconvened for '**Case Presentations**'. This as expected, was a lively and interactive session. It was interesting to hear an account of management of a patient suffering a vasovagal attack during an ophthalmic block. Our guest from across the pond presented a case of a morbidly obese patient unfit for general anaesthesia. This patient made life even more challenging by presenting with a history of 'allergy' to all the known ***'--caines'***, rendering even the local anaesthesia risky! To believe or not to believe the history was the question! Those who believed suggested 'cryoanalgesia' as an option, those who didn't preferred to carry on as usual.

Following the annual general meeting and lunch, **Dr Hamish McLure** chaired the second session of the day. Dr S Mather and Professor C Kumar adjudicated free paper presentations. The quality of the papers was high and presentations crisp. This year's 'Kumar Prize' was won by **Dr M Allen** from Moorfields Eye Hospital for his presentation entitled 'The Effect of Lidocaine on the Pain of the Sub-Conjuctival Injection'.

The poster competition was adjudicated by Dr R Johnson and Dr S Vohra. The best poster prize was awarded to **Micheal Tsatos** and colleagues from Norwich for their work on 'Local Anaesthesia for Trans-scleral Cyclodiode Laser Procedures'.

**Mr Tom Eke** chaired the final session of the day where the ophthalmologists played the lead parts once again. **Miss Marie Tsaloumas** gave a presentation on the use of Lasers in ophthalmic surgery with a particular emphasis on their safety. **Miss Hope-Ross** presented an account of Biometry and its pitfalls whilst **Mr Paul Chell** gave a stimulating talk on manpower planning and other medico-political issues surrounding the modern National Health Service. The day closed with **Mr Ken Barber** thanking all the participants and the delegates for their contributions.

The team of organizers Dr Monica Hardwick, Dr KL Kong, Mr Ken Barber and their secretary, are to be congratulated for putting together a very successful, informative and enjoyable meeting. Congratulations are also due to all the speakers for their enlightening presentations.

The next BOAS conference is scheduled for 21- 22 June 2007, to be hosted in York. Book your study leave now!

## Article

# Haemorrhagic complications of regional anaesthesia for cataract surgery in patients taking clopidogrel.

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Introduction

Recent advances in the management of acute coronary syndromes and cerebrovascular events, has led to a rise in the number of patients treated with clopidogrel. Clopidogrel has powerful anti-platelet effects and there is increasing evidence suggesting Clopidogrel is associated with increased surgical blood loss and need for transfusion in surgery, and a high risk of vertebral canal haematoma following neuroaxial blockade. However the incidence of haemorrhagic complications in patients treated with clopidogrel undergoing ophthalmic anaesthesia for cataract surgery is unknown and cessation for treatment could increase the risk of acute coronary syndromes and cerebrovascular events. Guidelines were therefore introduced in Cheltenham general hospital (CGH) in 2004 recommending the following:

1. Patients taking a short-term course of clopidogrel should be postponed until the course is finished.
2. Patients should be consented for increased risk of bleeding.
3. Sub-Tenon's should be performed rather than peribulbar blockade.
4. Patients on life-long combinations of clopidogrel, warfarin and/or aspirin should be discussed with the prescribing clinician; the patient should be left on one anticoagulant for the perioperative period (preferably warfarin).

Methods

We retrospectively analysed the case notes of 41 patients taking clopidogrel and undergoing phaco-emulsification surgery (total 28 patients; 14 patients underwent bilateral operations) between January 2004 and May 2006 at CGH. Data was collected using a standardised proforma. Descriptive statistics were used to analyse the data and qualitative data was compared using the $\chi^2$ test.

Results

The mean age was 77 (range 46-86) and 26 (63%) of patients were male. In addition to clopidogrel, five patients were taking aspirin *(12%)* and one patient (2%) was taking warfarin. Seven cases (17%) were consented for an increased risk of bleeding, six by the anaesthetist and one by the surgeon. The anaesthetic was performed by a consultant in 32 (78%) cases, a non-consultant career grade in seven cases (17%), a specialist registrar in one case (2%) and a senior house officer in one case (2%).

In 26 (63%) cases a sub-Tenon's block was performed and in 15 (37%) a peribulbar block was done.

In 19 cases the anaesthetist documented using a Honans intra-ocular pressure reducer and in 7 cases digital ocular pressure was applied. No case required a top-up during surgery and two cases required sedation for tremors.

Overall there were 2 major anaesthetic complications; in both cases a large anterior haematoma followed a medial peribulbar injection. Both were performed by experienced anaesthetic consultants, and both operations had to be postponed due to upper eyelid swelling. The incidence of a major haemorrhagic complications during peribulbar injection was 13% (2/15) whereas the risk following sub-Tenon's was 0% (P=0.056 $\chi^2$=3.64). One of the major haemorrhagic complications occurred in a patient taking both aspirin and clopidogrel and the other patient was taking clopidogrel alone.

## Discussion

This study supports our premise, although it does not statistically prove, that haemorrhagic complications are more likely to occur in patients taking clopidogrel and undergoing cataract surgery. This study also supports our new guidelines, which recommend the use of sub-Tenon's anaesthesia and mandatory consent for increased risk of bleeding in this patient group. It also supports our guidelines, which advises the avoidance of peribulbar blockade, which produced our two major haemorrhagic complications (P=0.056 $\chi^2$=3.64). The study numbers are small and a prospective, multi-centre study is therefore needed to validate this view. There is no other published evidence as to the haemorrhagic risk of clopidogrel in cataract surgery. This study is therefore valuable in guiding clinical practice until more substantial data becomes available. Current guidelines in CGH recommend the use of sub-Tenon's anaesthesia and mandatory consent for increased risk of bleeding in this patient group.

## Acknowledgements

The authors most gratefully acknowledge the help of Mr Kirkpatrick and the ophthalmologic surgeons in Cheltenham General Hospital for their help in devising the proforma and for their guidance in interpreting the data collected. We are particularly grateful to the pre-assessment staff at Cheltenham General Hospital for keeping a record of patients on clopidogrel.

## References

1. Kallio H, Paloheimo M, Maunuksela E-L. Haemorrhage and risk factors associated with retrobulbar/peribulbar block: a prospective study in 1383 patients. Br. J. Anaesthesia 2000; 85, No. 5 708-711

2. Hamilton RC, Gimbel HV, Strunin L. Regional anaesthesia for 12,000 cataract extraction and intraocular lens implantation procedures. Can J Anaesth 1988; 35: 615–23

3. Konstantatos A. Anticoagulation and Cataract Surgery: A Review of the Current Literature. Anaesth Intensive Care 2001; 29: 11-18

4. Davies BR. Combined aspirin and clopidogrel in cataract surgical patients: A new risk factors for ocular haemorrhage? Br. J. Ophthalmol. 2004; 88: 1226 – 1227

5. American College of Cardiology / American Heart Association Task Force on Practice Guidelines 2002

6. Summary of Product Characteristics (SPD), Plavix.


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## Article

# Impact of Systemic Illness on Peri-operative Anaesthesia Interventions in Patients Undergoing Cataract Extraction under Local Anaesthesia.

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BACKGROUND

- Phacoemulsification with intraocular lens implantation is now routinely performed under local anaesthesia

- It is widely advocated that surgery could be performed without the presence of an anaesthetist if any of the staff members have Advanced Life Support (ALS) training.

- No local anaesthetic (LA) technique is totally free from the risk of serious systemic adverse events, although they may not be always a consequence of the technique itself, but of other patient factors.

- Most patients presenting for ophthalmic surgery are elderly and have pre-existing medical problems.

- Local anaesthesia will usually be associated with the least morbidity and a day care procedure should cause the least disruption to their daily routine, and is now preferred by most patients and staff.
- Preadmission anaesthetic assessment by appropriately trained staff is highly desirable because of the high proportion of day case patients and significant incidence of medical co-morbidity.

CURRENT GUIDELINES

- ALL intraocular surgery performed under LA should be carried out in a facility which is appropriately staffed for resuscitation.

- Lists under local anaesthetic which do not require the immediate presence of an anaesthetist in the theatre suite do require the presence of an appropriately trained anaesthetic nurse, ophthalmic theatre nurse or operating department practitioner (ODP) to monitor the patient during establishment of local anaesthesia and throughout the operative procedure.

- An anaesthetist is not essential if topical, subconjunctival or sub-Tenon’s techniques without sedation are used.

- When peribulbar or retrobulbar techniques are used an anaesthetist should be available in the hospital. [*Theatre suite? – Ed.]*

METHOD

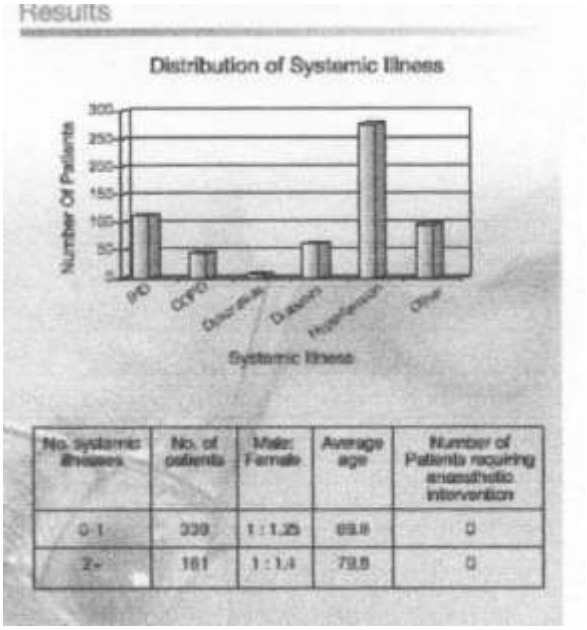
- 500 consecutive patients included in the study
- Retrospective analysis of clinical notes and operative pathways

- Patients grouped into those with one or less systemic illness and those with multiple systemic illnesses.

- Systemic illnesses were grouped as follows:

  -Ischaemic Heart Disease
  -Chronic Obstructive Pulmonary Disease
  -Blood Dyscrasias
  -Diabetes Mellitus
  -Hypertension
  -Other

  Any peri-operative anaesthetic intervention was recorded.




| No. systemic illnesses | No. of patients | Male: Female | Average age | Number of Patients requiring anaesthetic intervention |
|---|---|---|---|---|
| 0-1 | 339 | 1 : 1.25 | 69.8 | 0 |
| 2+ | 161 | 1 : 1.4 | 73.8 | 0 |

CONCLUSION

- This study demonstrates that systemic illness does not appear to have any influence on anaesthetic intervention peri-operatively.
- Provided a member of theatre staff is ALS trained an anaesthetist would not be required for any patients undergoing cataract extraction under local anaesthetic.

- Therefore we would agree with the current guidelines.

- However, it is reassuring for both surgeon and patient if an anaesthetist is available should the need arise.

References

REFERENCES

1. Eke.T, Thomson JR.The National survey of local anaesthesia for ocular surgery.II.Safety profiles of local anaesthesia techniques. Eye 1999b; 13:196-204.
2. Preoperative assessment and the role of the anaesthetist.AAGBI London 2001.
3. Local anaesthetic for intraocular surgery.Joint report by the Royal College of Anaesthetists and the Royal College of Ophthalmologists.RCoA and RCOphth London 2001.

**Editorial comment:**

**The editors would be grateful for the views of readers on this topic. There is considerable anecdotal and some scientific evidence that systemic, mainly cardiac, events occur not infrequently. Perhaps they are not noticed if an anaesthetist is not present I have seen S-T depression and bradydysrhythmia from the oculocardiac reflex completely ignored by theatre staff who were concentrating on the operation. No one was watching the monitors!**
**SM**

## Article

# Survey of Patient Satisfaction Following Day Case Cataract Surgery under Sub-Tenon Block

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It is common practice for a member of theatre staff to hold a patient's hand during ophthalmic surgery under local anaesthesia, in order that the patient may attract attention without speaking or moving their head during surgery, should the need arise.

It has been proposed at Northampton General Hospital that this may not be necessary, and could be an area in which to economise. Ophthalmic surgeons and theatre staff alike have expressed concern about this. I wished to explore patients' perceptions regarding this, and other aspects of their satisfaction with the service currently provided.

### Method

A survey was completed by 65 consecutive patients in the Ophthalmic Day Surgery Unit. As far as possible this was completed without any help from staff members. The data were collated and analysed using Microsoft EXCEL. 2 surveys were discarded as the patient had received a general anaesthetic.

### Results

| **Anxiety after pre-op consultation** | | | |
|---|---|---|---|
| More | 7 (11) | Less | 53 (84) |
| **Discomfort** | | | |
| During anaesthetic | None | 40 (63) | Helpful |
| | Mild | 22 (35) | Not helpful |
| | Severe | 1 (2) | Unsure |
| During operation | None | 48 (76) | |
| | Mild | 14 (22) | Utilized |
| | Severe | 1 (2) | Not utilized |

Table 1. Abbreviated results. Figures are: number of patients (% of total)

### Discussion

While these results show that patients rarely need to utilize the "hand to squeeze", it is quite clear that this is a much-appreciated aspect of their care in theatre, and serves as a reassurance whilst under the drapes. Another source of reassurance is the information received pre-operatively. This information serves to reduce anxiety in the vast majority of patients, and it is therefore important that patients feel they have received it before coming to theatre. The anaesthetist has an important role to play in this pre-operative preparation.

The degree of discomfort felt during both anaesthetic injection and during surgery compares favourably with other large scale studies. Guise found the block to be completely painless in 68.8% of cases[1], and Zafirakis et al found that 86% of patients had no pain or mild discomfort during surgery[2].

This survey shows an encouraging level of patient satisfaction in the

cataract service at Northampton General Hospital, and confirms the importance of the input from all members of the multi-disciplinary team.

## References


1. Guise PA. Sub-Tenon anaesthesia: a prospective study of 6000 blocks. *Anesthesiology* 2003; **98**: 964-8
2. Zafirakis p, Voudouri A, Rowe S, Livir-Rallatos G, Livir-Rallatos C, Canakis C, Kokolakis S, Baltatzis S, Theodossiadis G: Topical versus sub-Tenon's anaesthesia without sedation in cataract surgery. J Cataract Refract Surg 2001; **27**: 873-9

## Book reviews

Tom Eke

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**Ophthalmology Clinics of North America - *Ocular Anesthesia***

Moster & Azuara-Blanco

Elsevier Science Publications 2006

***Anesthesie en Chirurgie Ophthalmique***

Ripart & Nouvellon

Arnette Groupe 2006

Tom Eke
Norwich

This summer has seen the publication of two very different books, each of which will be of interest to readers of this newsletter. ***Ocular Anesthesia*** is a multi-author book; with many chapters written by BOAS and OAS members. Each section combines a literature review with practical advice. ***Anesthesie en Chirugie Ophthalmique*** is a slimmer, easy-read manual, beautifully laid out and well illustrated: unfortunately for most of us, every word is in French!

*Ophthalmology Clinics of North America* is a respected journal, published quarterly in the form of a hardback book. The June 2006 issue is entitled ***Ocular Anesthesia***.

You can purchase your own copy direct from the publisher, or from your medical bookseller for around £60 (see below).

The editors of ***Ocular Anesthesia*** wanted the book 'to provide practical clinical information about anesthesia for ocular surgery'. In each chapter, the authors have provided a literature review as well as practical advice. Inevitably, the 'practical advice' sometimes reflects the authors' own preferences and prejudices. The chapters are:

- *History of ocular anesthesia* Douglas Bacon (USA)
- *Pharmacology of local anesthetics* Tim Jackson & Hamish McLure (UK)
- *Pre-op testing and preparation for ophthalmic surgery* Bobbie Jean Sweitzer (USA)
- *General anesthesia for ophthalmic surgery* Kathryn McGoldrick & Peter Foldes (USA)
- *Sedation Techniques in Ophthalmic Anesthesia* Shireen Ahmad (USA)
- *Choices of Local Anesthetics for ocular surgery* Gary Cass (USA)
- *Sub-Tenon's anesthesia* Chandra Kumar & Chris Dodds (UK)
- *Orbital regional anesthesia* Gary Fanning (USA)
- *Choosing anesthesia for cataract surgery* Joselito Anvaleza, Sagun Pendse, Mark Belcher (USA)
- *Anesthesia considerations for vitreo-retinal surgery* Steve

Charles & Gary Fanning (USA)

- *Anesthesia for glaucoma surgery* Tom Eke (UK)
- *Oculoplastic & Orbital surgery* Adam Cohen (USA)
- *Anesthesia for pediatric ocular surgery* Steven Gayer, Jacquline Tutiven (USA)
- *Succinylcholine & the open eye* Elie Joseph Chidiac & Allex Oleg Raiskin (USA)
- *Management of the blind painful eye* Shannath Merbs (USA)
- *Complications of anesthesia for ocular surgery* Marc Goldberg (USA)
- *Economic evaluation of different systems for cataract surgery & anesthesia* Kevin Frick (USA)

This choice of chapters is itself of interest: there's an excellent chapter on sub-Tenon's anaesthesia, but where are the corresponding chapters on sharp-needle and topical LA? A section on LA safety and complications would also have been welcome.

This book suffers from the usual problem in ophthalmic anaesthesia: each author has their favoured anaesthetic technique, and each thinks that theirs is the best! For example, the authors of 'Choosing anesthesia for cataract surgery' are obviously unkeen on topical anesthesia, whereas the author of 'Anesthesia for glaucoma surgery' (myself) feels that topical-intracameral is best for virtually all cataracts. Luckily, this partisan rhetoric is fairly easy to spot!

Another problem is that the system in the USA is very different to that in the UK, as is particularly evident in the chapter on pre-op assessment. The section on the costs of different systems for cataract surgery was disappointing, in that it could not reach any conclusions. The sensible reader will see through all of this, and find it to be a very useful book. Overall, it is a welcome combination of practical advice and literature review.

***Anesthesie en Chirugie Ophthalmique*** is written by Jacques Ripart and Emmanuel Nouvellon of Nimes, France. Jacques is an anaesthetist with a particular interest in orbital anatomy and block technique, and is a strong proponent of the 'episcleral' (sharp-needle sub-Tenon) LA technique for intraocular surgery. He is a good friend to BOAS, and has been guest speaker at more than one BOAS meeting. Many of his excellent cadaver studies are reproduced in this slim volume, which is beautifully laid out and illustrated.

The book is more of a practical handbook, with a logical progression of chapters and plentiful illustrations. Chapters are short and concise, and the most important points are highlighted in boxes. The authors have tried to avoid being labelled as partisans/detractors for any particular LA technique, and they have succeeded better than most. I found the book easy to read from cover to cover, despite having only O-level French.

The chapters, roughly translated, are:

- Anatomy of the orbit & contents
- Anatomy for LA
- Ocular physiology
- Eye surgery techniques
- Pharmacology of anaesthetics for ophthalmology
- LA techniques
- Complications of LA
- Topical & intracameral LA
- Management of the patient for eye surgery
- Ambulatory surgery
- Open globe & full stomach
- Ophthalmic complications of non-ophthalmic surgery

I strongly recommend this book to anyone who wants to learn about ophthalmic anaesthesia, provided they can cope with the language. It is particularly suited to trainees, and trainers. For those who can't read French, I recommend buying the book and then going to evening classes!

Book references:

Moster MR, Azuara-Blanco A (Eds). ***Ocular Anesthesia***. *Ophthalmology Clinics of North America* 2006; vol 19, number 2. Philadelphia, PA: WB Saunders, 2006. (321 pages)
ISBN 1-4160-3578-8
Publisher's website:
www.theclinics.com
£60.99 mail order from BMJ bookshop (delivery within 4 days)

Ripart J, Nouvellon E. ***Anesthesie en Chirugie Ophthalmique***. Rueil-Malmaison, France: Arnette Groupe Liaisons SA, 2006. (103 pages)
ISBN: 2-7184-1141-4

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Prescribing information: Sevoflurane 250ml
Refer to Summary of Product Characteristics for full information
Presentation: Amber bottle containing 250ml Sevoflurane, water (as a Lewis Acid inhibitor). Indications: For induction and maintenance of general anaesthesia in adult and paediatric patients for inpatient and outpatient surgery. Dose: MAC values decrease with age and the addition of nitrous oxide (see Summary of Product Characteristics). Induction: In adults up to 5% Sevoflurane usually produces surgical anaesthesia in less than 2 minutes; in children up to 7% Sevoflurane usually produces surgical anaesthesia in less than 2 minutes. Up to 8% Sevoflurane can be used for induction in unpremedicated patients. Maintenance concentrations range from 0.5-3%. Elderly: Lesser concentrations normally required. Administration: Deliver via a vaporiser specifically calibrated for use with Sevoflurane. Induction can be achieved and maintenance sustained in oxygen or oxygen-nitrous oxide mixtures. Contra-indications: Sensitivity to Sevoflurane. Known or suspected genetic susceptibility to malignant hyperthermia. Precautions: For use only by trained anaesthetists. Hypotension and respiratory depression increase as anaesthesia is deepened. Malignant hyperthermia. Experience with repeat exposure is very limited. Until further data are obtained, Sevoflurane should be used with caution in patients with renal insufficiency. Levels of Compound A (produced by direct contact with CO2 absorbents) increase with: Increase in canister temperature; increase in anaesthetic concentration; decrease in gas flow rate and increase more with the use of Baralyme rather than soda lime. The exothermic reaction that occurs with inhalational agents, including Sevoflurane and CO2 absorbents, is increased when the CO2 absorbent becomes desiccated (dried out). If the CO2 absorbent is suspected to be desiccated, it should be replaced. Interactions: Potentiation of non-depolarising muscle relaxants. Similar to isoflurane in the sensitisation of the myocardium to the arrhythmogenic effect of adrenaline. Lesser concentrations may be required following use of an IV anaesthetic. Sevoflurane metabolism may be induced by CYP2E1 inducers, but not by barbiturates. Side-Effects: Very Common side-effects: Dose-dependent cardiorespiratory depression; nausea, vomiting, cough, hypotension, bradycardia and agitation, particularly in children. Common side-effects: Somnolence, chills, dizziness, increased salivation, respiratory disorder, hypertension, tachycardia, laryngismus, fever, headache, hypothermia, increased SGOT. Uncommon side-effects: Arrhythmias, increased LDH, increased SGPT, hypoxia, apnoea, leukocytosis, ventricular extrasystoles, asthma, confusion, increased creatinine, urinary retention, glycosuria, atrial fibrillation, complete AV block, bigeminy, leucopenia. Rare side-effects: Allergic reactions e.g. rash, urticaria, pruritus, bronchospasm, anaphylactic or anaphylactoid reactions. Also post-operative hepatitis, but with an uncertain relationship to sevoflurane. Very rare side-effects: Malignant hyperthermia, acute kidney failure, pulmonary oedema and convulsions, particularly in children. As with other anaesthetics, twitching and jerking movements, with spontaneous resolution have been reported in children during induction. Patients should not be allowed to drive for a suitable period after Sevoflurane anaesthesia. Prescribers should consult the summary product of characteristics for further information on side effects. Use in Pregnancy and Lactation: Use during pregnancy only if clearly needed. It is not known whether Sevoflurane is excreted in human milk - caution in nursing women. Overdose: Stop Sevoflurane administration, establish a clear airway and initiate assisted or controlled ventilation with pure oxygen and maintain adequate cardiovascular function. Special Storage Conditions: Do not store above 25°C. Do not refrigerate. Keep cap tightly closed. Legal Category: POM. Marketing Authorisation Number: PL 00010/0258. Basic NHS Price: 250ml bottle £123.00. Further information is available on request from: Abbott Laboratories Ltd., Abbott House, Norden Road, Maidenhead, Berkshire SL6 4AE. Date of revision of PI: December 2005. Ref: PI/12/12
Reference:
1. Sevoflurane Market Share. Data on File. LA601SB5.
Information about reactions for adverse event reporting can be found at www.yellowcard.gov.uk
Alternatively, adverse events can be reported to Abbott Laboratories.
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