Fast Track Paper

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GUIDELINES

Local anaesthesia for ophthalmic surgery—new guidelines from the Royal College of Anaesthetists and the Royal College of Ophthalmologists

There has been a progressive change in the anaesthetic practice for ophthalmic surgery over the past decade, and this has continued to evolve since the last guidelines on 'Local Anaesthesia for Intraocular Surgery' were produced by the Royal College of Anaesthetists and Royal College of Ophthalmologists in 2001. Major advances include a continuing shift to day care, increased focus on the patient, and the involvement of the entire ophthalmic team in all components of the process. Local anaesthesia (LA) is used more frequently, and 'newer' LA techniques such as sub-Tenon's anaesthesia and topical-intracameral anaesthesia are now in widespread use. The British Ophthalmic Anaesthesia Society (http://www.boas.org) was founded in 1999 and hosts annual scientific meetings. The Cochrane Collaboration has published five systematic reviews related to LA for eye surgery. Despite these advances, numerous fundamental questions that relate to ophthalmic anaesthesia remain unanswered.

A working group of the Royal College of Anaesthetists and the Royal College of Ophthalmologists was convened to review the LA guidelines. This led to the publication of the 2012 guideline *Local Anaesthesia for Ophthalmic Surgery*.[1] The working group comprised practicing anaesthetists and ophthalmologists, representing a range of opinion on LA techniques. Ideally, robust guidelines are based on numerous high-quality studies, which have been designed to answer important clinical questions. For many aspects of LA practice, it was apparent that the literature is not adequate. The group was aware of this issue when preparing these guidelines, which are based on published evidence (where available) and the agreed opinion of committee members. The purpose of the guidelines is to provide information for all members of the ophthalmic team in order to promote safe and effective LA for ophthalmic patients. These guidelines set minimum standards and do not guarantee a specific outcome. They are intended to apply to practice in the United Kingdom.

The Summary section from the 38-page document is reproduced below. Readers are encouraged to access the full document,[1] which is freely available at the websites of the Royal College of Ophthalmologists http://www.rcophth.ac.uk and Royal College of Anaesthetists http://www.rcoa.ac.uk.

Summary of Guidelines

General comments

- Day care ophthalmic surgery under local anaesthesia (LA) is now preferred by most patients, surgeons and other staff, and is associated with the least disruption to the patient's normal activity.
- Multiprofessional team-working is fundamental to safe effective day care surgery. Appropriately trained nurses are increasingly performing tasks that were previously undertaken by medical staff, especially in relation to preoperative assessment and preparation.
- These guidelines may require to be fine-tuned to meet local requirements, but the following general aspects remain pertinent.
  - Record keeping must be comprehensive, clear, and unambiguous for patients' safety and to comply with clinical audit and governance.
  - The results of preoperative assessment should be recorded on a checklist, which is completed before the patient enters the operating theatre area.
  - Every trust, hospital, or unit undertaking ophthalmic surgery should identify one anaesthetist with overall responsibility for the anaesthetic services to the eye department.
  - Good communication between members of the anaesthesia-surgical team is essential.
  - All ophthalmic surgery performed should be carried out in a facility that is appropriately equipped and staffed.

Preoperative assessment

- The preoperative assessment should be conducted according to locally designed protocols, which should include routes of communication about abnormalities or concerns.
- Preoperative assessment should normally be undertaken by trained specialist nurses with medical input as required.
- For the patient with no history of significant systemic disease and no abnormal findings on examination at the nurse-led assessment, no special investigations are indicated. Any patient requiring special tests may also need an opinion from a doctor.
- The patient should be provided with appropriate information regarding surgery and anaesthesia, thereby reducing anxiety to a minimum.
- The preoperative assessment visit should take place within 3 months of the surgery.

Day of surgery

- Preoperative checks must be made on the day of surgery. Recent changes in the patient's condition or therapy that might affect the surgical event must be identified.
- Local orbital blocks should be administered by a trained anaesthetist or ophthalmologist. Appropriately trained, indemnified and professionally regulated non-medical staff may administer topical, subconjunctival, or sub-Tenon's blocks for selected, ambulatory cataract surgery, provided the criteria for safe monitoring and management of complications are met (wherever this document refers to '…professionally regulated

non-medical staff…', this should be taken to include those physician's assistants (anaesthesia) (PA(A)s) who have qualified against the DH/RCoA curriculum and who are entered on the voluntary register of the Association of PA(A)s. It is anticipated that full registration with the Health Professions Council for these anaesthesia team members will be completed shortly after the publication of this document.).

- For difficult cataracts and complex procedures, sub-Tenon's blocks should only be administered by a trained anaesthetist or ophthalmologist.
- Intravenous sedation should only be administered under the direct supervision of an anaesthetist whose sole responsibility is to that list.
- Local staffing availability will dictate whether an anaesthetist can be provided for all ophthalmic lists. An anaesthetist is not essential when topical, sub-conjunctival, or sub-Tenon's techniques without sedation are used.
- When peribulbar or retrobulbar techniques are used, the responsibility for the immediate management of complications lies with the ophthalmologist or anaesthetist administering the LA. An anaesthetist should normally be available in the hospital for further management if necessary.
- No LA or surgical technique is entirely free from the risk of serious systemic adverse events, although these events may not be always a consequence of the technique itself.
- The patient should be continuously monitored, from before the administration of the LA to the end of the operation. Monitoring should be by clinical observation, pulse oximetry, and using other equipment as appropriate.
- A suitably trained individual must have responsibility for monitoring the patient throughout anaesthesia and surgery.
- All theatre personnel should participate in regular basic life support (BLS) training, and there should always be at least one person immediately available who has immediate life support (ILS) training or equivalent. Where the unit is free-standing and there is no immediate access to a formal cardiac arrest team there should be at least one person with advanced life support (ALS) or equivalent. A clear, agreed and regularly tested pathway to enable the patient to receive appropriate advanced medical care, including intensive care, should be in place for isolated units.

Discharge and aftercare

- All patients are advised to have a friend or relative to accompany them to surgery and at discharge, and this is essential for those who are frail and elderly.
- Discharge criteria must be established for each unit.
- Written instructions should be given to the patient about what to do and whom to contact in the event of problems or concern.

Clinical governance (training, audit, clinical incident reporting, indemnity)

- High-quality care requires that all personnel dealing with ophthalmic surgery under LA have a specific training. Professional groups should only perform those anaesthetic techniques that are accepted and indemnified by their recognised professional body.
- Record keeping must be comprehensive, clear, and unambiguous.
- Any potentially life- or vision-threatening complications of ophthalmic anaesthesia must be reported as critical incidents within each institution's clinical governance framework.
- Audit of ophthalmic anaesthesia should be included in departmental audit programmes.

Reference

1 Kumar CM, Eke T, Dodds C, Deane JS, El-Hindy N, Johnston RL *et al*. Local anaesthesia for ophthalmic surgery. Joint guidelines from the Royal College of Anaesthetists and the Royal College of Ophthalmologists: London, 2012.

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