

EYE BLOCKS

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Eye blocks represent a safe, simple and reliable choice of anaesthesia for intraocular surgery.

A large proportion of patients presenting for ophthalmic surgery are elderly, with significant medical co morbidities and extensive drug therapy. For some of them, general anaesthesia might be a hazardous or even unacceptable choice. Eye blocks would offer a perfect anaesthetic alternative for these patients.

Per-operative preparation, conduct and technique of eye blocks vary considerably worldwide.

The different techniques of local anaesthesia for eye surgery evolved over the last several decades. Both akinetic and non-akinetic methods are described. Sharp and blunt needle techniques are in use.

Previously considered the gold standard, the retrobulbar block was replaced, as a result of a relatively high incidence of significant complications, with the peribulbar block, surpassed in the 90's by the even safer and less painful SubTenon block. Today, in the UK, for selected cases booked for phacoemulsion and intraocular lens insertion, there is a significant trend of replacing even the SubTenon block with topical anaesthesia (local anaesthesia eye drops).

Guidelines for eye blocks were published by a Joint Committee of Royal College of Anaesthetists and Royal College of Ophthalmologists as early as 2001. A more recent guideline for cataract surgery was published in September 2010.

Before embarking on any type of eye (local) anaesthesia, a rigorous anaesthetic preassessment system needs to be in place. This will allow early diagnostic of uncontrolled hypertension, significant dyspnoea, Insulin-de-

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pendant diabetes mellitus, tremor, pathology requiring therapeutic anticoagulation etc., as well as relevant ophthalmic pathology, medical and/or surgical.

Knowledge of relevant anatomy of the orbit and its contents is paramount for the safe practice of eye blocks.

Accepted standards of monitoring have to be maintained throughout procedure. Additional oxygenation, as availability of assistants reassuring the awake patient throughout procedure is very important. In selected cases, limited amount of sedation could be carefully used in titrated increments.

Use of topical local anaesthetic eye drops pre-block is essential.

Rigorous asepsis should be maintained.

Local anaesthesia for eye surgery could be classified as:

- Topical (non-akinetic)
- Blunt cannula technique (SubTenon block)
- Sharp needle techniques (akinetic): peribulbar and retrobulbar blocks.

Presentation will focus on the 3 main eye blocks, i.e. blunt and sharp needle techniques, with a particular emphasis on peribulbar and SubTenon blocks. Advantages/disadvantages of both are compared/contrasted. Relevant complications are discussed.

In conclusion, in many patients eye blocks represent the optimal choice of anaesthesia for intraocular surgery.