

A Short Note on Retrobulbar Block

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DESCRIPTION

A retrobulbar block is a regional anaesthetic nerve block performed behind the globe of the eye in the retrobulbar space. The retrobulbar block is achieved by injecting local anaesthetic into this region. By inhibiting cranial nerves II, III, and VI, this injection causes akinesia of the extraocular muscles, stopping the globe from moving. Because the cranial nerve IV is outside the muscular cone, it is unaffected by local anaesthetic. As a result, ocular intorsion is still a possibility. By inhibiting the ciliary nerves, it also offers sensory anaesthesia for the conjunctiva, cornea, and uvea. This block is typically used during cataract surgery, although it can also be used for other intraocular procedures.

Any sort of eye surgery or operation that requires eyeball (globe) anaesthetic and eye muscle paralysis, such as cataract surgery, corneal surgery, or refractive surgery, requires a retrobulbar block. Ocular or systemic complications can occur as a result of this obstruction. Hematoma formation, optic nerve injury, and globe perforation with possible blindness are examples of local ocular consequences. Local anaesthetic toxicity, brainstem anaesthesia, and stimulation of the oculocardiac reflex are examples of systemic consequences. The sensation of the needle during insertion and/or pressure behind the eye during injection is the most prevalent complaints from patients during the procedure. Peribulbar block has become more popular in recent years due to its lower risk of complications. Prior to doing this block, resuscitative equipment, monitoring, and people must be promptly ready.

With the patient seated or supine and gazing straight ahead, the retrobulbar block is administered. The head should be held in a

neutral position at all times. A needle (22-27 Gauge, 3 cm long) is placed at the inferolateral edge of the bone orbit and directed straight back until it passes through the globe's equator. It's then aimed medially and cephalad toward the orbit's apex. As the needle tip passes through the muscle cone dividing the retrobulbar area, a 'pop' is occasionally heard. After a negative blood aspiration, the needle is withdrawn and 2-4 mL of local anaesthetic solution is given. Two regularly utilised compounds are 2% Lidocaine (Xylocaine) and 0.5 percent to 0.75 percent bupivacaine (Marcaine). Epinephrine, a vasoconstrictor routinely coupled with local anaesthetics, is not used in seeing eyes because it can produce a central retinal artery occlusion. Hyaluronidase, an enzyme, is usually used in anaesthetic solutions because it aids in the distribution of the drug. With a successful retrobulbar injection, akinesia and anaesthesia occur within minutes. Although a retrobulbar block can be used successfully for corneal transplantation, a secondary facial nerve block may be required.

The levator palpebrae muscle can be blocked with a retrobulbar block, but not the orbicularis oculi. In addition to retrobulbar block, a variety of facial nerve block procedures can be performed. Local anaesthetic is injected into the retrobulbar space, which is the area behind the globe of the eye, in this method. By inhibiting cranial nerves II, III, and VI, this injection causes akinesia of the extraocular muscles, stopping the globe from moving. Proptosis, poor visual acuity, intense pain, and increased intraocular pressure are all symptoms of an arterial retrobulbar haemorrhage.

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