Summery

At present there is no absolutely safe orbital regional block technique. Sub-Tenon's block is a simple, effective, relatively safe and versatile technique. Although rare complications can occur following this block, thorough knowledge of anatomy and understanding of the underlying principles is essential before embarking on a sub-Tenon's block.

A sub-Tenon's block eliminates the risks of sharp needle techniques, provides reliable anesthesia, can be supplemented for prolonged anesthesia and postoperative pain relief, and can be safely used in patients who have a long globe.There are numerous studies that demonstrate its effectiveness compared with retrobulbar, peribulbar, and topical anesthesia alone. Sub-Tenon's block has been used mainly for cataract surgery, but also vitreoretinal surgery, panretinal photocoagulation, strabismus surgery, trabeculectomy, optic nerve sheath fenestration, chronic pain management, and therapeutic delivery of drugs.

Recent reviews suggest that sub-Tenon's block may be used safely in patients who receive anticoagulants and antiplatelet agents, as long as clotting results are in the normal therapeutic range. Despite reports of a few major complications, sub-Tenon's block has one of the highest safety profiles of any regional anesthetic technique.

Atracurium was used in the present study as an adjuvant to local anaesthetic mixture in order to study its effect on onset and duration of eyelid and globe akinesia, and it proved to be effective as it hastened the onset and prolonged the duration in the study group compared to control group with no apparent systemic or local complications.

Conclusion

In conclusion, the addition of low dose atracurium 0.5 mg to local anaesthetic solution shortens the onset time and prolongs the duration of akinesia without known complications.

Further studies are required to optimize the dose of neuromuscular blockers to be added to local anaethetics to make sub-Tenon's block more effective.