

Introduction

Anaesthetists play a pivotal role in 21st century ophthalmology by providing anaesthesia for various ophthalmic surgical procedures. They not only administer general anaesthesia but also perform local blocks and provide sedation, orbital pain relief for both acute as well as chronic conditions, monitor patients and manage life threatening complications (*Kumar,et al;2002*).

Ophthalmic surgery has been carried out in one form or another for centuries but there is little detail of any anaesthetic that might have been used. In the late 19th century ophthalmic surgery was limited to cataract treatment and iridectomy performed sometimes with topical cocaine.

Later, needle techniques were introduced using at first cocaine and then procaine. However, general anaesthesia provided the opportunity for more complex surgery without fear of pain and this led to advances in ophthalmic surgery over the last century. There has been a steady and progressive development in ophthalmic surgical technique that continues to evolve (*Elfituri, et al; 2008*).

The provision of anaesthesia for ophthalmic surgical procedures varies around the world with an increasing tendency towards orbital regional and local anaesthesia the exception being where general anaesthesia is desirable or essential (*Eke & Thompson; 2007*).

Although rare, many serious complications have been reported following needle blocks and this has led to the introduction of newer sub-Tenon's block as a safer alternative (*Ripart ,et al; 1998*).

ITRODUCTION

In sub-Tenon's block, local anaesthetic agent is injected under the Tenon's capsule this block is also known as parabulbar block,, pinpoint anaesthesia and medial episcleral block (*Ripart ,et al;2000*).

The delivery of sub-Tenon's anaesthetic, directly irrigating the immediate retro bulbar region, is effective and reliable in providing both analgesia and akinesia. However, akinesia is variable and may not be complete (*Guise; 2003*). The use of an adjuvant to accelerate onset of akinesia could further improve its efficacy. Atracurium is used as an adjuvant to local anaesthetics in order to provide better akinesia and accelerate the onset of anaesthesia. Atracurium has been used in regional blocks in humans, such as Bier's block.

The sub-Tenon's technique appears to get closer to the characteristics of an ideal block than with retrobulbar block, avoiding many serious complications of the later. Another advantage of sub-Tenon's technique is that it is usually associated with only minor discomfort, which may explain the excellent degree of patient acceptance.(*Soufia; 2005*)

Aim of the work

The aim of this study is to compare between onset and duration of lid and globe akinesia produced by adding low dose atracurium (0.5 mg) to lidocaine 2% and bupivacaine 0.5% (1:1) in one group and using anaesthetic mixture of plain lidocaine 2% + plain bupivacaine 0.5% (1:1) for Sub-Tenon's local anaesthesia in cataract surgery .