Laryngeal Mask Airway in Ophthalmic Surgery; 
A Comparison Study

Jamal Abdelaziz, MD, JBA*
Mohamad Alhashky, MD, JBO, ABO**

Objective: This prospective study was performed to compare the effect of the laryngeal mask airway (LMA) with a tracheal tube (TT) on intra-ocular pressure (IOP), heart rate and mean blood pressure during general anaesthesia for cataract surgery.

Methods: We studied 35 patients (ASA I & II according to American society of anaesthesia) who were operated under general anaesthesia for cataract surgery. Patients were divided randomly into 2 groups, the first received standardized general anaesthesia with LMA (19 patients) and the second group with TT (16 patients). The IOP was measured at 30 sec and 3 min post-intubation or LMA application. It was also measured at 1 minute and 5 minutes after extubation or LMA removal. Mean blood pressure and heart rate were continuously recorded.

Results: The intra-ocular pressure remained significantly lower than the baseline value in the LMA group at all time after insertion. In the TT group intra-ocular pressure increased significantly 30 seconds after intubation and 1 minute after extubation. Mean arterial pressure and heart rate after insertion and removal of the airway management devices were significantly higher than baseline value in the TT group, while during the same periods no significant change was observed in LMA group.

Conclusion: General anaesthesia using LMA is an acceptable technique for intra-ocular surgery as it provides cardiovascular and intra-ocular pressure stability.