

# Comparison of two methods of using lubricant gel and lidocaine 2% gel when placing the laryngeal mask airway on the symptoms of hemodynamics and anesthesia reactions in patients undergoing cataract surgery: A randomized double-blind clinical trial study

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## Abstract

**Introduction:** Due to the high sensitivity, eye surgeries should have the least irritating reactions after anesthesia. On the other hand, due to the fact that the laryngeal mask is less irritated, using this device is always a good choice in cataract surgery. Postoperative stimulation the present study was designed to compare the two methods of using Lubricant gel, lidocaine gel during laryngeal mask airway (LMA) on hemodynamic symptoms and anesthesia reactions in patients undergoing cataract surgery.

**Materials and Methods:** This randomized double-blind clinical trial study was performed on 120 patients undergoing cataract surgery. Patients were randomly divided into 60 equal groups of lidocaine gel and lubricant gel. Systolic and diastolic blood pressure, heart rate and arterial oxygen saturation before and immediately after induction 5 minutes after surgery 15 minutes after surgery, 30 minutes after surgery and were calculated in recovery. Episodes of cough, sore throat, nausea and vomiting in recovery, 2, 6, 12 and 24 hours after surgery were also recorded in the ophthalmology department.

**Results:** The findings of the present study indicated that the groups were not significantly different in terms of demographic characteristics. There was no significant difference between cough, nausea and heart rate and oxygen saturation rate of arterial blood 30 minutes after surgery and recovery in the airway of the laryngeal mask after its exit, but in sore throat and saturation of arterial blood hemoglobin there is a significant difference. The intensity of sore throat in the lidocaine group decreased and the oxygen saturation of arterial blood increased in the 15 minutes after surgery in the lidocaine group.

**Conclusion:** The results showed that in general, the use of lidocaine could be effective in reducing the severity of sore throat after surgery compared to lubricant, although no significant difference was observed between other variables; it is recommended in future studies in surgery and Caesar with more facilitators for LMA. © 2021, Semnan University of Medical Sciences. All rights reserved.

## Author keywords

Cataract; Hemodynamic; Laryngeal Mask; Lidocaine; Lubricant