

ABSTRACT FOR THESIS:A COMPARATIVE STUDY OF DESFLURANE AND SEVOFLURANE IN SHORT SURGICAL PROCEDURES LIKE FIBROADENOMA UNDER GENERAL ANAESTHESIA WITH SPONTANEOUS RESPIRATION

AIM:Primary objective:TO compare the emergence,recovery,airway adverse

effects of desflurane and sevoflurane in short surgical procedures like

fibroadenoma using proseal LMA under general anaesthesia with spontaneous respiration.

Secondary objective:To compare haemodynamic parameters such intraoperative

Heart rate variability and MAP variability.

Methodology and Materials:It's a randomized comparative single blinded study

conducted among 60 female patients divided into Group D and Group S of 30

each .

Both groups are premedicated with Inj.glycopyrrolate 0.004mg/kg,Inj.emeset0.1

mg/kg, Inj. Fentanyl 1.5mcg/kg and preoxygenated for 3 minutes with 6 litres of oxygen and induced with inj. propofol 2.5mg/kg and Proseal

LMA inserted according to weight by myself and each maintaining with nitrous oxide:oxygen in

ratio of 66:33 with endtidal desflurane 4% in Group D and endtidal sevoflurane 1.2% in Group S. After LMA removal emergence, recovery, airway adverse effects are all noted.

Results: The extent of exposure to anaesthetic was similar in both groups .

Desflurane has rapid emergence (Time to response to painful stimulus, Time to response to verbal commands, spontaneous eye opening) and recovery (Time taken to LMA removal, Time taken to recall of names) incompared with sevoflurane and it is clinically significant ($p < 0.05$). Desflurane had more incidence of airway adverse effects (cough, breath holding, laryngospasm) 9 out of 30 patients developed cough with $SPO_2 > 95\%$ and it is clinically significant ($p \text{ value} < 0.01$) .

Conclusion: In our randomized comparative study between Desflurane and sevoflurane in fibroadenoma surgery we concluded that desflurane used for

maintainance of a rapid emergence and recovery from anaesthesia with high incidence of cough with no significant heamodynamic changes compared with sevoflurane.PONV and other adverse effects were comparable between two groups.

KEYWORDS:DESFLURANE,SEVOFLURANE EMERGENCE,AIRWAY ADVERSE EFFECTS P,PROSEAL LMA ,SPONTANEOUS RESPIRATION