

Protection against aspiration of gastric contents: The laryngeal mask airway Proseal vs endotracheal tube

Sir,

We read with interest the article titled “The comparison of Proseal laryngeal mask airway and endotracheal tube in patients undergoing laparoscopic surgeries under general anaesthesia” by Saraswat and colleagues^[1] in the March–April issue of IJA.

The primary variables studied were oxygenation and ventilation, based on which the power of the study was calculated to be 0.9. However, the predominant concern in the comparison of the two devices is the risk for aspiration of gastric contents. The reported incidence of clinically significant pulmonary aspiration in healthy patients undergoing elective surgery with the Laryngeal Mask Classic (LMA-C) is 1 in 5,000 to 1 in 12,000.^[2,3] This is a similar order of magnitude to the incidence with endotracheal tube (ETT) or facemask in ASA I or II patients undergoing elective surgery.^[4] Based on this incidence, to prove that the Proseal laryngeal mask airway (PLMA) is as good as the ETT to prevent aspiration and, keeping the power of the study to a minimum of 0.8 using the formula for equivalence trials with $\alpha=0.05$, the total number of patients required to be included in the study are 5781 in each group.

Despite other reports of safe use of PLMA in large series,^[2,5] there still is concern about the safety of this practice.^[6] The present study is not adequately powered to conclude that the PLMA is a safe and

suitable alternative as compared with ETT where pulmonary aspiration of gastric contents is concerned.

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Quick response code	Website: www.ijaweb.org
	DOI: 10.4103/0019-5049.89907