Reinforced Laryngeal Mask Airway in ENT Surgery: a 15 years experience

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BACKGROUND AND GOAL OF STUDY

The use of the reinforced laryngeal mask airway (rLMA) for ENT surgery has grown in the last decades. Several studies have reported a low incidence of respiratory complications and a smoother emergency with the use of this supraglottic device. However, there is still some concerns regarding the risk of an unprotected airway shared with the surgeon. Given the experience of our department, the authors propose to review the casuistry of the last 15 years.

MATERIALS AND METHODS

We retrospectively analyzed 19000 anesthetic records of elective ENT surgeries performed between January 2001 and December 2015. The procedures in which rLMA was used as the first choice for airway device were selected. We recorded the type and duration of surgery as well as the perioperative complications.

RESULTS AND DISCUSSION

rLMA was the airway device used in 47.8% of surgeries. The use of rLMA was more frequent for short-term surgeries as compared with long-term procedures, namely oropharynx and nose versus ear surgery (table 1). Adenotonsillectomy and septoplasty made up for 19,2% and 16,7% of the surgical procedures, respectively.

The incidence of perioperative complications was similar to that reported in literature^(1,2). Airway obstruction by the BoyleDavis gag was the most frequent complication (4,5%), which, in most cases, was solved by switching to a larger blade (figure 1). Cough (1,7%), laryngospasm (0,5%) and airway soiling (0,5%) were also observed. There was a low incidence of cases in which it was necessary to replace the rLMA for a tracheal tube (0.9%). There were no reports of pulmonary aspiration.

Table 1 - Surgical procedures

		N		Duration (min)
Throat	Adenoidectomy	979	4230	51+- 12
	Tonsillectomy	1084		
	Adenotonsillectomy	1742		
	Oropharynx biopsy	49		
	Uvuloplasty	376		
Nose	Dacryocystorhinostomy	227	3517	128+-19
	Rhinoplasty	189		
	Septoplasty	1513		
	Endonasal micro-endoscopic surgery	1223		
	Nasal fracture surgery	365		
Ear	Stapedectomy	317	1298	159 +- 24
	Mastoidectomy	237		
	Tympanoplasty	744		
Neck	Tracheostomy	37		36 +- 11

Figure 1 - rLMA use in ENT surgery

CONCLUSION

This retrospective study shows that rLMA could be a safe and effective alternative to orotracheal tube in ENT surgery. Its use requires a thorough perioperative approach of the airway, an accurate selection of patients and a close cooperation between the anesthetic and surgical team⁽³⁾.

REFERENCES

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