Case Report

Access this article online
Website: www.cjisa.org

Soft palate ulceration due to proseal LMA in a patient posted for ptosis surgery: a case report

Bhavna Sriramka, Shaswat kumar Pattnaik
Department of Anesthesia and Critical care IMS & Sum Hospital Bhubaneswar, Odisha 751003

Address for correspondence:
Dr Bhavna Sriramka,
106 Mahadev Orchid,
Cosmopolis road Dumduma,
Bhubaneswar 751019
E mail: bhavna.sriramak@gmail.com

ABSTRACT

Laryngeal Mask Airways (LMA) are popular mode of anesthesia in modern day practice especially with day care surgeries. The complications are few and even less reported as many times the patient is discharged the same day. We found a case of palatal injury in a patient posted for ptosis under Proseal LMA and would like to highlight this complication and discuss the literature.

Key words: Complications, palatal ulceration, proseal LMA

INTRODUCTION

Laryngeal Mask Airways (LMA) are supraglottic or Extra Glottic Airway Devices (EGAD) that have increasingly becoming popular in day care surgeries. These are less invasive and time consuming with minimal airway instrumentation and have several advantages compared with endotracheal intubation[1]. Most of the eye surgeries require minimal or no muscle relaxants and can be easily carried out with LMA under sedation[2]. However few complications associated with the LMA have been reported in literature[3–5]. We hereby report a case of a palatal injury following Proseal LMA posted for ptosis surgery in our hospital.

CASE REPORT

A 25 year male with body weight 67 kg and American Society of Anesthesiology physical status I was for posted ptosis surgery of right eye. Anesthesia was induced with glycopyrrolate 0.05 mg/kg, Propofol 2mg/kg, Fentanyl 2 mcg/kg, Midazolam 0.05mg/kg, and a size 4 proseal LMA with water-based lubricant was easily inserted at the first attempt, inflated with 30 ml of air and fixed by taping it to the maxilla. No muscle relaxant was given to the patient. Anesthesia was maintained with nitrous oxide (50%) in oxygen and isoflurane 1%. Patient was allowed on spontaneous ventilation and $Etco_2$ monitoring was done along with the vital parameters. The PR, BP, SPO2 were maintained within normal limits. The duration of surgery was 40 minutes.

Figure 1. Ulceration of soft palate on left side seen 2 days post ptosis surgeries.

The Proseal LMA was removed after the surgery and discontinuation of inhalational agents as the patient was awake. Spontaneous ventilation was adequate, and

How to cite this article: How to site the article: Sriramka B, Pattnaik SK. Soft palate ulceration due to proseal LMA in a patient posted for ptosis surgery: a case report Central Journal of ISA 2017;1(2):83-84.

the protective airway reflexes were intact. On routine inspection of mouth post removal an erythematous patch was noted on the Soft palate. Two days later the patient complained of dysphagia and on examination found to have a large ulcer on left side of hard palate of size about 2x4 cm (Figure 1). This was managed with oral Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), benzydamine hydrochloride mouthwash and topical lidocaine gel. Three weeks later, the patient has complete healing of the ulcer with mild taste alterations.

DISCUSSION

LMA have gained popularity in past few decades because of ease, fast and safe anesthesia. However some complications have been noted and some remain unreported mainly as patient is discharged same day in day care surgery[6]. Sore throat remains a common complaint post operative though nerve damage, arytenoid dislocation, epiglottitis, and uvular bruising have also been reported[3–5].

The suggested causes of LMA related injuries reported are related to insertion technique; cuff pressure; bigger size of LMA along with longer duration of surgery and use of nitrous oxide[7]. The inflated cuff of the LMA exerts a sealing pressure on surrounding tissue to allow ventilation, but inadvertent excessive cuff pressure can exceed tissue capillary perfusion pressure of the pharyngeal mucosa (32mm of Hg) and result in ischemic ulceration[8]. This is namely when cuff inflation is with exceeding volume of air as recommended by the manufacturer or gradual diffusion of nitrous oxide into the cuff during surgery[9]. Gradual diffusion of nitrous into the cuff could have been the reason in our case. Cuff pressure manometer should be routinely to regulate the cuff pressure not to exceed 60 cm of water to minimize the complication[10]. Other measures include judicious use of anticholinergic agents to prevent excessive dryness of mouth and liberal use of lidocaine jelly for smooth insertion. Patients under steroids or those with diseases leading to fragility of mucosa/skin have increased chances of injury[6].

CONCLUSION

Palatal ulcers are one of the rare reported complications of LMA which may be due to variability of intracuff pressures for a given volume of air which calls for routine monitoring of cuff pressure during the procedures requiring cuffed EGADs

REFERENCES

1. Yu SH, Beirne OR. Comparison of LMA and ETT Complications. J Oral Maxillofac Surg. 2010; 68:2359–76. https://doi.org/10.1016/j.joms.2010.04.017 PMid:20674126.
2. Akhtar TM, McMurray P. A comparison of laryngeal mask airway with tracheal tube for intra-ocular ophthalmic surgery. J Anesth. 1992; 47:668–71. https://doi.org/10.1111/j.1365-2044.1992.tb02387.x.
3. Rujirojindakul P, Prechawai C, Watanayomnaporn E. Tongue numbness following laryngeal mask airway Supreme™ and i-gel™ insertion: two case reports. Acta Anaesthesiol Scand. 2012; 56:1200–3. https://doi.org/10.1111/j.1399-6576.2012.02695.x PMid:22524512.
4. McHardy FE, Chung F. Postoperative sore throat: cause, prevention and treatment. Anaesthesia. 1999; 54:444–53. https://doi.org/10.1046/j.1365-2044.1999.00780.x.
5. Li HY, Lee LA, Wang PC, Hsiao HR, Hsu CY, Chen NH, Fang TJ. Taste disturbance after uvulopalatopharyngoplasty for obstructive sleep apnea. Otolaryngol Head Neck Surg. 2006; 134:985–90. https://doi.org/10.1016/j.otohns.2006.02.034 PMid:16730543.
6. Henri DG, Rosemarijn T, Marcel DQ, Serge V, Eldert B. Soft palate ulceration after brief use of an i-gel supraglottic airway. A&A Case Reports. 2014; 3(4):48–50. https://doi.org/10.1213/XAA.0000000000000048 PMid:25611222.
7. Zuccherelli L. Postoperative upper airway problems. SAJAA. 2003; 9(2):12–6. https://doi.org/10.1080/22201173.2003.10873000.
8. Marjot R. Pressure exerted by the laryngeal mask airway cuff upon the pharyngeal mucosa. Br J Anaesth. 1993; 70(1):25–9. https://doi.org/10.1093/bja/70.1.25PMid:8431328.
9. Lumb AB, Wrigley MW. The effect of nitrous oxide on laryngeal mask cuff pressure. In vitro and in vivo studies. Anaesthesia. 1992; 47(4):320–3. https://doi.org/10.1111/j.1365-2044.1992.tb02173.x PMid:1519684.
10. Bick E, Bailes I, Patel A, Brain AI. Fewer sore throats and a better seal: why routine manometry for laryngeal mask airways must become a standard of care. Anaesthesia. 2014; 69(12):1304–8. https://doi.org/10.1111/anae.12902 PMid:25303083.