

Blockbuster laryngeal mask airway as a boon in neonate undergoing ophthalmic surgery

Dear Editor,

Ophthalmic procedures often require general anesthesia in children. Securing airway is the prime responsibility of the anesthesiologists. Use of laryngeal mask airway (LMA) and endotracheal intubation are the commonest methods used for managing airway. Pressor responses,^[1] coughing, straining, breath holding, and increased ocular pressure are some of the undesirable effects associated with intubation due to intense sympathoadrenal stimulation. Use of LMAs decreases the incidence of such undesirable responses.

A 29-day preterm male neonate weighing 1.6 kg, delivered at 7 months of gestation, presented with left lower eyelid swelling, 3 cm × 2.4 cm × 1.7 cm on CT scan possibly veno-lymphatic malformation. The final diagnosis was left dacryocystitis with orbital cellulitis [Figure 1]. The patient was posted for incision and drainage and macular examination. His total leucocyte count was $18.5 \times 10^3/\text{Cu mm}$ and C-Reactive Protein was positive. Rest of the investigations were within normal range. Written and informed consent was obtained from the child's parents.

Preoperatively, the pupils were dilated for a retinal screening. In the operating room, routine monitoring was

started and a 26-gauge intravenous access was secured in the left dorsum of hand. Preoperative vitals were within the normal range. After induction, blockbuster LMA size # 1 was inserted [Figure 2], and the patient was kept on spontaneous respiration. Anesthesia was maintained with sevoflurane in air-oxygen mixture. At the end of the surgery, LMA was removed. Postoperatively, the patient was monitored in neonatal ICU for 24 h for any complications. Both the intraoperative and postoperative courses were uneventful.

Use of LMAs in children is common specially for minor surgeries.^[2] However, its use in premature infants has been a matter of ongoing research. In a recent retrospective



Figure 1: Preoperative swelling visible on the left lower lid



Figure 2: Immediate postoperative picture of the patient with LMA BlockBuster *in situ*

analysis, it was found that the incidence of postoperative respiratory complications, e.g., laryngospasm, coughing, delayed extubation, postoperative apnea,^[3] breath-holding, sore throat, respiratory tract infections, bucking, desaturation, etc., was less with LMA compared to endotracheal intubation. LMA use in ophthalmic surgeries leads to lesser increases in intraocular pressure compared to endotracheal intubation.^[4]

We planned to use a second-generation supraglottic airway device – LMA Blockbuster (LMA-BB). The advantages of LMA-BB are as follows: a gastric port for esophageal/gastric suctioning and ability to pass an endotracheal tube through it. Since the anatomy of BB-LMA is such that airway tube is short and $>95^\circ$ angulation, which aligns with the oropharyngeal curve, it is easier to put endotracheal tube through it with a higher success rate. Due to the presence of dorsal cuff, it provides a better oropharyngeal airway seal pressure during positive pressure ventilation and also reduces the chances of aspiration. The Tourensblockbuster^R LMA, first launched in 2012, became popular because it conferred increased safety and quality of anesthesia, ease of ventilation, less time of insertion, conduit for intubation, and decreased risk of aspiration.^[5]

In conclusion, LMA-BB may be an effective alternative to conventional endotracheal tubes for use in ophthalmic surgeries in premature neonates. Further studies will be required to substantiate the evidence.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient's guardian has given his consent for patient's images and other clinical information to be reported in the journal. The patient's guardian understand that their names and initials will not

be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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