

Baska Mask Failure: Culprit Resides at the Posterior Commissure

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Baska Mask (BM), the second-generation supraglottic airway device (SGAD), has many novel features, which should improve safety when used in both spontaneously breathing and IPPV anesthesia [1]. These include a noninflatable cuff, which reduces the risk of oropharyngeal tissue and/or nerve damage induced by cuff overinflation, a known complication with other supraglottic airways [2]. It also has an additional gastric channel and a bite block. We recently encountered an unusual case of Baska mask failure.

A 55-year-old, 70 kg, ASA II male patient presented to the emergency with a de-gloving injury of the right hand. The patient was fully conscious with stable vitals. The patient's chest was bilateral clear with no added sounds. Rest other systemic examinations were within normal limits. The patient was having 3 fingers mouth opening, modified Mallampati grade II, partially edentulous, no loose tooth, and bucked tooth. Neck movement was adequate with the thyromental distance of 6 cm and no neck mass present.

The patient was posted for elective debridement and amputation of the 4th and 5th distal phalanx under general anesthesia as the patient refused regional anesthesia. Patient was premedicated with glycopyrrolate 0.2mg i.v., midazolam 1mg i.v. and fentanyl 100mcg i.v. Muscle relaxation was achieved with 6 mg Vecuronium.

A size 4 Baska Mask lubricated with 2% lignocaine jelly was inserted orally. It was connected to the circle anesthesia breathing system (Figure 1).

Figure 1- Buska Mask of size 4 insitu



Ventilation with self-inflating bag experienced high airway resistance and on auscultation bilaterally equal but decreased breath sounds were heard. Chest rise was also not adequate. The bite block of the Baska mask was inside the mouth. Peak inspiratory pressure reached 28 cmH₂O and EtCO₂ progressively increased to 40 mmHg.

Repositioning of the head and neck was done. Still, there was no improvement in ventilation. Acute bronchospasm was suspected. Ventilation with 100% oxygen resumed, the plane of anesthesia deepened, and levosalbutamol spray and injection hydrocortisone 100

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mg intravenous were given, but ventilation did not improve.

The circuit was disconnected and BM was removed (Figure 2).

Figure 2- Removed Baska Mask of size 4



Bag mask ventilation was done for 3 minutes. Then for the diagnostic purpose, we did laryngoscopy to find out the obstructive cause of upper airway obstruction in BM placement. It was found that there was a swelling undiagnosed at the posterior commissure which would have prevented effective seal in the supraglottic region. The patient was immediately intubated with an 8.5-mm cuffed polyvinyl chloride (PVC) endotracheal tube and was connected to the ventilator. All ventilatory parameters became normal and the surgery was started. The rest of the intraoperative course went uneventful. The patient was extubated successfully at the end of the surgery.

Dr. Kanag and Meenakshi Baska have designed the BM, which takes significantly shorter placement time and provides a better seal as compared to PLMA [3].

The three most common malpositions can happen with BM, which may lead to inadequate ventilation. The first

is when the device is not deeply seated resulting in the tip sitting into the mid-pharynx. It results in air leaking through the drainage tube during PPV and a poor seal. The second can be when the tip gets impacted and folded on epiglottis will result in airway obstruction and leak through the drainage tube. The third malposition can be tip folded posteriorly and fail of the drainage tube to perform its functions. In our case, the cause of unanticipated difficult SGAD placement was mechanical obstruction and improper sealing despite easy placement and correct positioning. So, a definite airway plan should always be ready to overcome unanticipated difficult SGAD placement.

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