

Macintosh Laryngoscope Aided Tongue Elevation eases Difficult LMA Classic™ Insertion

D Gupta, H Khurana, S Kumar Sharma, G Nirwani Goyal, S Mishra, S Bhatnagar

Citation

D Gupta, H Khurana, S Kumar Sharma, G Nirwani Goyal, S Mishra, S Bhatnagar. *Macintosh Laryngoscope Aided Tongue Elevation eases Difficult LMA Classic™ Insertion*. The Internet Journal of Anesthesiology. 2007 Volume 18 Number 1.

Abstract

Dear Editor,

We report a patient in whom unpredicted difficult LMA insertion was resolved with laryngoscope blade aided soft-handed tongue elevation.

A 50-year-old 50-kg female, a diagnosed case of carcinoma cervix, was posted for three sessions of weekly implant insertion under general anesthesia for intracavitary brachytherapy (ICBT). On pre-anesthetic examination, the only positive finding was narrow hard palate. After induction of anesthesia, LMA Classic™ insertion was attempted by an anesthesiologist of more than 7 years clinical experience with more than 95% success rate of successful insertion of LMA Classic™ in the first attempt. The LMA Classic™ was not negotiated from the oral axis of the tongue to pharyngeal axis of the tongue. After two failed attempts and observation of minor bleeding from uvula, insertion was successfully attempted under the Macintosh size-3 blade aided soft-handed tongue elevation to create space for alignment of LMA Classic™ cuff along the pharyngeal axis of the tongue. Post-procedure, a skiagram neck revealed straightening of cervical spine with spondylitic changes and presence of anterior and posterior osteophytes in fifth and sixth cervical vertebrae; and 90° angle between the oral and the pharyngeal axis at the back of tongue (Figure 1).

Figure 1

Figure 1: Skiagram neck showing straightening of cervical spine with spondylitic changes and presence of anterior and posterior osteophytes in fifth and sixth cervical vertebrae; and oropharyngeal axis angle being 90°.



The other two sessions of ICBT under general anesthesia were accomplished with soft-handed tongue elevation aided LMA Classic™ insertion without attempting standard digital insertion technique.

Every time, the correct position of the LMA Classic™ was confirmed with transverse neck ultrasound (USG), intra-LMA fiberoptic laryngoscopy (FOL), and intranasal fiberoptic oropharyngoscopy (FOOP) after LMA cuff-inflation; the confirmations being the centrally located tent view of the LMA cuff on USG, with completely visible vocal cords, parallel to the LMA aperture bars on FOL and LMA cuff seen inflated equally and bilaterally in relation to the LMA airway tube on FOOP. The only post-anesthesia complication was sore throat that lasted for 1-3 days with duration being more after the first ICBT session.

This is the first time that use of laryngoscope for LMA Classic™ insertion is being reported in literature; though similar reports with ProSeal™ LMA have been documented earlier. Micaglio and colleagues (1) have successfully used Glidescope™ to facilitate five cases of difficult ProSeal™ LMA positioning where the digital and introducer tool insertion techniques failed. The causes for difficult LMA Classic™ insertion in our patient were cervical spondylosis, narrow hard palate and oropharyngeal axis being 90°; these causes were similar to the ones observed by Micaglio and colleagues (1). Similarly, Ishimura et al. (2) had suggested that LMA insertion appear to be impossible when the angle

between the oral and the pharyngeal axes is smaller than 90° at the back of the tongue. The Glidescope™ may be gentler and less traumatic with a comparable or superior view than direct laryngoscopy (3,4); however, Glidescope™ was not available for our patient and moreover, our goal while using the Macintosh blade was soft-handed tongue elevation only without the need for the complete visualization of the laryngeal opening and it was achieved with no change in the vital parameters during the tongue elevation.

CORRESPONDENCE TO

Dr Sushma Bhatnagar Associate Professor and Head Dept. of Anesthesiology Room No-242, DR. BRA-IRCH All India Institute of Medical Sciences Ansari Nagar, New Delhi 110029, INDIA Phone No: 91-9868398300 FAX No: 91-11-26588663 Email ID: shumob@yahoo.com

References

1. Micaglio M, Parotto M, Trevisanuto D, Zanardo V, Ori C. Glidescope™/gastric-tube guided technique: a back-up approach for ProSeal™ LMA insertion. *Can J Anesth* 2006; 53: 1063-4.
2. Ishimura H, Minami K, Sata T, Shigematsu A, Kadoya T. Impossible insertion of the laryngeal mask airway and oropharyngeal axes. *Anesthesiology* 1995; 83: 867-9.
3. Brimacombe J, Keller C, Judd DV. Gum elastic bougie-guided insertion of the ProSeal™ laryngeal mask airway is superior to the digital and introducer tool techniques. *Anesthesiology* 2004; 100: 25-9.
4. Cooper RM, Pacey JA, Bishop MJ, McCluskey SA. Early clinical experience with a new videolaryngoscope (GlideScope®) in 728 patients. *Can J Anesth* 2005; 52: 191-8.

Author Information

Deepak Gupta, M.D.

Department of Anesthesiology, Institute Rotary Cancer Hospital, All India Institute of Medical Sciences

Himanshu Khurana, M.D.

Department of Anesthesiology, Institute Rotary Cancer Hospital, All India Institute of Medical Sciences

Sanjeev Kumar Sharma, D.A.

Department of Anesthesiology, Institute Rotary Cancer Hospital, All India Institute of Medical Sciences

Gaurav Nirwani Goyal, M.D.

Department of Anesthesiology, Institute Rotary Cancer Hospital, All India Institute of Medical Sciences

Seema Mishra, M.D.

Department of Anesthesiology, Institute Rotary Cancer Hospital, All India Institute of Medical Sciences

Sushma Bhatnagar, M.D.

Department of Anesthesiology, Institute Rotary Cancer Hospital, All India Institute of Medical Sciences