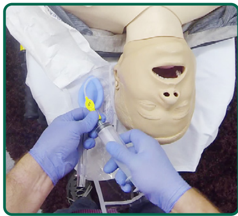
Expert in my pocket

LARYNGEAL MASK AIRWAY

Laryngeal Mask Airway



❶ Preparing for the procedure

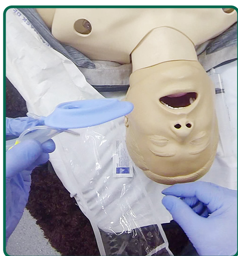
a. Sanitise hands and apply nitrile gloves and face shield.

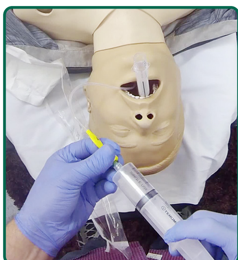
b. Select the appropriate LMA size, remove the LMA from its sterile packet and attach a 50 ml syringe to the cuff inflation port.

c. Hold the LMA by the tube and place cuff face down against a flat sterile surface to completely deflate the cuff by drawing back on the syringe.

d. Detach the syringe and pull back the plunger to the required volume for reinflation post insertion.

e. Lubricate the anterior and posterior surfaces of the mask tip and 5-7cm of the posterior distal end of the tube with water-based lubricant.





❷ Performing the procedure

a. The clinician is positioned behind patient's head maintains the head in either the "neutral position" (by placing small pillow or folded towel under the patient's occiput), or in the "sniffing position" (by extending the head and flexing the patient's neck).

b. Grasp the LMA firmly between fingers and thumb of the left hand using a pen-like grip, with the index finger placed anteriorly at the junction of the tube and cuff. The opening should be facing the patient's chin with the distal aperture facing towards the tongue.

c. Advance the mask over the top of the tongue, pushing the back of the mask against the hard palate. A gentle rotation of approx +/- 20° of the tube around its long axis when entering the pharynx may assist to correctly seat the LMA.

d. Maintain firm but not forceful downwards pressure until the cuff has almost disappeared and forward movement stops.

e. Inflate cuff with the correct volume of air. Do not restrain the LMA during the inflation – the LMA may adjust position automatically.

f. Attach a ventilation device and gently ventilate the patient whilst observing rise and fall of the chest. Use capnography if available.

g. Auscultate the anterior chest and also auscultate the abdomen to rule out gastric inflation.

h. Secure by using a tube-holding device or insert a bite block between rear teeth and secure the LMA using 2.5 cm Transpore tape.

Background

Insertion of an LMA is reserved for the airway management of the unconscious patient without a gag reflex and who requires assisted ventilation. The ease of insertion of the laryngeal mask airway is similar with the patient's head in the standard position or neutral position.[1] When perfectly positioned, the LMA lies with the tip resting against the upper oesophageal sphincter, the sides facing the pyriform fossae with the upper surface behind the base of the tongue with the epiglottis pointing upwards. For healthcare professionals trained in its use, the laryngeal mask airway is an acceptable alternative to bag-mask ventilation or endotracheal intubation.[3]

The standard insertion technique for the laryngeal mask airway (LMA) involves insertion with the cuff fully deflated using a midline approach and the deflated rim posterior, and using a midline approach.[1] Note that a small proportion of patients cannot be ventilated with the laryngeal mask airway[3] even after successful insertion, hence patency of the airway must be checked post insertion.

Equipment required

- Hand sanitiser
- Nitrile gloves
- Face shield
- LMA (range of sizes based on bodyweight)
- 50 ml luer lock syringe
- Water-based lubricant

Please visit the website for more videos and additional information.

http://expertinmypocket.com.au

References

1. Brimacombe J, Berry A. Insertion of the laryngeal mask airwa—a prospective study of four techniques. Anaesth Intens Care. 1993;21(1):89-92.
2. Brimacombe J, Berry A. Laryngeal mask airway insertion: A comparison of the standard versus neutral position in normal patients with a view to its use in cervical spine. Instability Anaesthesia. 1993;48(8):670-1.
3. Neumar RW, Otto CW, Link MS, Kronick SL, Shuster M, Callaway CW, et al. Part 8: Adult advanced cardiovascular life support 2010 American Heart Association Guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. Circulation. 2010;122(18 suppl 3): S729-S67.

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