

# Facemask General Anesthesia for Minor and Outpatient Surgery: A Dying Art?

Olumuyiwa A. Bamgbade, MBBS, FWACS, FRCA  
Ann Arbor, Michigan

Facemask general anesthesia is suitable for many minor surgeries but has become unpopular partly because of the laryngeal mask airway. Appropriate facemask anesthesia is safe, effective and cheap, and associated with minimal complications. It also improves the airway management skills of the anesthesiologist. The art and teaching of facemask anesthesia should be encouraged.

**Key words:** anesthesia ■ outpatient ■ airway management ■ morbidity

© 2006. From Department of Anesthesiology, University of Michigan, Ann Arbor, MI. Send correspondence and reprint requests for *J Natl Med Assoc.* 2006;98:1202 to: Dr. Olumuyiwa A. Bamgbade, Department of Anesthesiology, University of Michigan, Ann Arbor, MI 48109; phone: (734) 936-4271; fax: (734) 936-9091; e-mail: obamgbad@umich.edu

General anesthesia via facemask is a technique that is very suitable for most adult minor or short outpatient surgical procedures. It was relatively popular for this purpose until the advent of the laryngeal mask airway (LMA) in the last two decades. Personal experience and informal communications observed by the author in Nigeria, Britain and the United States show a dearth of facemask general anesthesia for appropriate minor or short outpatient procedures in adults.

The LMA has become increasingly popular in the provision of general anesthesia because it is a relatively safe alternative to the use of facemask or endotracheal tube for airway management. It is easy to use, reusable and relatively inexpensive. It is also relatively less traumatic or stimulating than endotracheal intubation. However, as the popularity of the LMA is increasing, so are the reports of complications associated with its use. Reported complications of LMA use include arytenoid dislocation, hematoma and injury to the hypoglossal, lingual and recurrent laryngeal nerves.<sup>1</sup> Airway mucosal trauma and sore throat are five times higher compared to facemask anesthesia.<sup>2</sup> Displacement of the LMA and partial airway obstruction during use have also been reported.<sup>3</sup> Although the LMA is very durable, there have been reports of total damage at insertion or at removal.<sup>4</sup>

Facemask general anesthesia is safe and effective if used for the appropriate patient, procedure and operative setting. Many studies have shown no significant difference in gastro-esophageal insufflation and reflux during general anesthesia with the LMA or facemask—even with controlled ventilation.<sup>5,6</sup> Facemask anesthesia also affords hands-free anesthesia practice, with the aid of a special harness to fix the facemask to the patient's head. The modern rubber harness is more elastic, flexible and exerts less pressure on the head than the old neoprene harness.

The art of facemask anesthesia should be encouraged despite the availability of the LMA. It affords good training in basic airway management and is useful for short procedures, including those outside the operating department. It is cheaper than endotracheal anesthesia because it requires less airway equipment and fewer anesthetic drugs. Most importantly, appropriate facemask anesthesia is effective and associated with minimal complications.

## REFERENCES

1. Chan TV, Grillone G. Vocal cord paralysis after laryngeal mask airway ventilation. *Laryngoscope.* 2005;115:1436-1439.
2. Higgins PP, Chung F, Mezei G. Postoperative sore throat after ambulatory surgery. *Br J Anaesth.* 2002;88:582-584.
3. Von Ungern-Sternberg BS, Erb TO. Partial airway obstruction by a pediatric laryngeal mask airway. *Anesth Analg.* 2004;99:951.
4. Spielman FJ. Complete separation of the tube from the mask during removal of a disposable laryngeal mask airway. *Can J Anaesth.* 2002;49:990-992.
5. Ozlu O, Turker AK, Ozgun G, et al. Distal esophageal pH measurement in children during general anaesthesia using the laryngeal mask airway, tracheal tube, and face mask. *Paediatr Anaesth.* 2001;11:425-429.
6. Weiler N, Latorre F, Eberle B, et al. Respiratory mechanics, gastric insufflation pressure, and air leakage of the laryngeal mask airway. *Anesth Analg.* 1997;84:1025-1028. ■

## We Welcome Your Comments

The *Journal of the National Medical Association* welcomes your Letters to the Editor about articles that appear in the *JNMA* or issues relevant to minority healthcare. Address correspondence to ktaylor@nmanet.org.