effective seal because of the differences between adult and pediatric upper airway anatomy. We are not aware of any work on this. Finally, if secretions or blood are not cleared at the end of the procedure, this is likely to result in increased LMA contamination upon withdrawal.

We have also observed that overinflating the LMA cuff distorts its shape and reduces the area of contact with the pharynx, thus worsening the seal. We do not know how the authors assessed the adequacy of the seal in their study. This may be an additional factor explaining higher contamination scores.

We agree that further studies using reinforced LMA and direct scoring with endoscopic examinations may clarify the situation.

M. Zubair Ahmed MB BS FRCA
Akbar Vohra MB CHB DA FRCA
London, UK

Reference

1 *Ahmed MZ, Vohra A.* The reinforced laryngeal mask airway (RLMA) protects the airway in patients undergoing nasal surgery – an observational study of 200 patients. Can J Anesth 2002; 49: 863–6.

Function of the aperture bars on the LMA

To the Editor:

I read with great interest the letter of Drs. Al-Shaikh and Pilcher indicating that the epiglottic retention aperture bars on the Classic laryngeal mask airway (LMA; Laryngeal Mask Company Ltd., Oxon, U.K.) were without apparent useful function.[1] A new disposable Portex LMA (Portex Ltd., Kent, U.K.), which does not have epiglottic retention aperture bars, has been recently introduced. I have inserted and then fibreoptically examined the position of the new disposable Portex LMA in ten patients. In all patients, the new Portex LMA worked acceptably well as a ventilatory device. However, I found that in most of these patients the epiglottis entered the breathing shaft of the aperture bar-less Portex LMA, which made it difficult to identify supralaryngeal and laryngeal anatomy. In order to identify anatomy and intubate the trachea fibreoptically in these patients, I had to pull the Portex LMA back approximately 0.5 to 1.0 cm; the LMA pull back allowed disengagement of the epiglottis from the breathing shaft of the LMA (of varying degrees from partial to total) and identification of the anatomy. Although the new Portex epiglottic retention aperture bar-less LMA has the advantage of allowing one full size greater endotracheal tube to pass through the breathing shaft (compared to the same sized Classic LMA), the lack of aperture bars is a distinct disadvantage. It is hoped that this communication will stimulate others to further examine the function of aperture bars.

Jonathan L. Benumof MD
San Diego, California

Reference

1 *Al-Shaikh B, Pilcher D.* Is there a need for the epiglottic bars in the laryngeal mask airway? (Letter). 2003; 50: 203–4.

Reply:

Thank you for giving us the opportunity to reply to Professor Benumof who showed interest in our study.[1] We have shown that the absence of the epiglottic bars in the laryngeal mask airway (LMA)-Classic™ has no effect on either its clinical performance (in 380 patients) or the fibreoptic endoscopic view of the larynx (in 80 patients). The new disposable Portex Soft Seal™ LM has been in use for some time in Europe. It is deliberately designed without epiglottic bars and with an internal "bowl" that has a larger internal volume to ensure that any epiglottis that may fall into it would not obstruct the lumen of the tube. A study comparing the performance of a size 4 Portex Soft Seal™ LM with a size 4 LMA-Classic™ in 200 spontaneously breathing adult patients undergoing various surgical procedures has shown no difference in the clinical performance and the endoscopic view of the larynx in both groups.[2] The incidence of sore throat in the early postoperative period was significantly lower in the Portex Soft Seal™ LM group. This can be either (or both) due to the absence of the epiglottic bars or the limitation to the rise in intra-cuff pressure during N_2O anesthesia in the Portex Soft Seal™ LM group due to the very low permeability of the Soft Seal™ cuff material to N_2O.

Baha Al-Shaikh FFARCSI
Ashford, Kent

References

1 *Al-Shaikh B, Pilcher D.* Is there a need for the epiglottic bars in the laryngeal mask airway? (Letter). 2003; 50: 203–4.

2 *Van Zundert AAJ, Fonck K, Al-Shaikh B, Mortier E.* A comparison of the LMA-Classic™ with the new disposable Soft Seal™ LM in spontaneously breathing adult patients. Anesthesiology 2003; (in press).