Correspondence

The LMA for unplanned prolonged procedures

To the Editor:

Asai and Morris suggest that the laryngeal mask airway (LMA) should not be used for procedures lasting >2 hr.[1] Their reasoning focuses on the theoretical risk of increased pharyngeal morbidity and regurgitation. However, procedures frequently take longer than predicted and the question arises as to whether the LMA should be removed and the trachea intubated if anaesthesia extends beyond two hours. We would like to present data from 15 patients who underwent planned prolonged anaesthesia which suggests that in the hands of experienced personnel the technique is safe for some procedures of 4–8 hr duration. All patients were ASA 1–3 and underwent lower limb orthopaedic or plastic surgery. A balanced regional technique was utilised as previously described.[2] The mean (range) for age, weight and procedure duration was 36 (18–52) yr, 81 (57–92) kg and 4.6 (4.1–7.8) hrs. All LMA insertions were successful at the first attempt with a median fibreoptic score of 3.3. The SpO_2 remained >95% and $P_{ET}CO_2$ ranged from 34 to 68 mmHg. In four patients, thoraco-abdominal movement was monitored with two extensometers[2] and there was no evidence of respiratory fatigue. There was also no evidence of positional instability of the LMA cuff or regurgitation. Three patients developed a mild sore throat, but there were no other adverse sequelae. These data lend further support to the concept that prolonged LMA usage is safe[2,3] and suggests that there is no need to exchange the LMA for a tracheal tube if surgery unexpectedly exceeds two hours.

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REPLY

In our review article, we did not suggest that the CMA should not be used for procedures lasting greater than two hours, and did not discuss whether the laryngeal mask should then be removed and the trachea intubated. We stated that "it is not clear whether the incidence of regurgitation increases with the duration of surgery when the laryngeal mask is used."[1] We also suggested that "it is not possible to define how long the airway can be safely managed with the laryngeal mask, but continuous vigilance is required during its use."[1]

A large number of patients are required to show that the incidence of pulmonary aspiration does not increase with prolonged use of the laryngeal mask. Drs. Brimacombe and Berry estimated the incidence of pulmonary aspiration for which intensive care is required after the use of the laryngeal mask is between 1:900 and 1: 250,000.[2] To show that the incidence is no greater than this with prolonged use of the laryngeal mask, between 30,000 and 750,000 patients would be required.[3]

We believe that our statement from the review article is sensible and would be supported by a majority of anaesthetists: "It is prudent not to use the laryngeal mask for prolonged anaesthesia until controlled studies show that this is safe" (authors' italics).

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The LMA in intracranial aneurysm surgery

To the Editor:

The anaesthetic management of intracranial aneurysms is a trade-off in avoiding hypertension to prevent aneurysmal rerupture[1] and hypotension to prevent aggravation of pre-existing cerebral ischaemia due to vasospasm.[2-4] There are several advantages of the laryngeal mask air-

way (LMA) over the conventional endotracheal tube including decreased cardiovascular responses during insertion.[5-8]

We used the LMA in two patients with anterior communicating artery aneurysm, aged 50 and ;62 yr. Clipping of aneurysm was done on the 34th and eight post-bleed day. There was no history of any other systemic illness. Preoperatively patients were conscious and oriented. Patients were receiving nimodipine 60 mg six-hourly, phenytoin 100 mg eight-hourly *po* and dexamethasone 4 mg eight-hourly *im*. Premedication was with diazepam. After meperidine 50 mg *im* the radial artery was cannulated under local anaesthesia and baseline values of heart rate and blood pressure were recorded. Anaesthesia was induced with thiopentone 350 mg and three minutes after vecuronium, a # 4 LMA was introduced. Anaesthesia was maintained with N_2O, 66% in O_2 and the lungs were ventilated to maintain $ETCO_2$ at 32 mmHg. Monitoring of heart rate (HR), ECG, Minimal increases in systolic arterial pressure (SAP), mean arterial pressure (MAP) diastolic arterial pressure were observed during insertion of LMA and throughout the surgical procedure. Emergence was very smooth. Postoperatively, patients were fully conscious and their subsequent course at the hospital was uneventful.

The LMA can be therefore used in place of ETT in aneurysm surgery to achieve haemodynamic stability. However, there are a number of concerns with the use of an LMA. Could a further decrease in $PaCO_2$ be achieved with the LMA? Another concern is gastric distention. Displacement of the LMA, especially in a setting with no access to the head and neck could be difficult to manage. We suggest that the LMA be considered as an alternative to tracheal intubation in intracranial aneurysm patients where difficult intubation is anticipated.

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Publishing and the Internet

To the Editor

The recent expansion of internet information services has provided a fascinating new avenue for exchange of information, in the field of medicine. This resource can currently be considered in its infancy, and continued development is sure to lead to greater use by a growing number of anaesthetists worldwide. Currently, most of the material appearing on the internet is not peer-reviewed (an exception is "Educational Synopsis in Anesthesia" published electronically each month by K. Ruskin and edited by a panel headed by D.J. Doyle.) The inevitable question that arises is: does publication of material on the internet constitute duplicate publication, if this same material is presented elsewhere in a printed format? The answer to this question may not be as simple as it first appears. Material can be presented in many ways on the internet, and can take various paths to it. For example, an article in development may be presented, allowing for critical appraisal by email, before it is submitted to a peer-reviewed journal. Alternatively, a published article could be reproduced electronically as a WWW (world wide web) page, with the original reference cited. Many other scenarios exist. As part of the growth of this new information resource, we believe clear publication guidelines are needed worldwide to ensure the academic integrity of anaesthesia internet information. We very much welcome comments and guidance regarding this most important issue.

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