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# REPLY

Thank you for the opportunity of replying to Todesco et al.'s comments about our use of the Laryngeal Mask Airway (LMA) for nasal polypectomy and antral washout after failed awake fiberoptic intubation.

They unfortunately appear to misquote Fisher et al.'s<sup>1</sup> editorial on two important points. Firstly, "risk of aspiration" refers to aspiration of the contents of the gastro-intestinal tract. Ours was an elective, fasted patient, with no history of oesophageal reflux. We use a 176 cm × 9 cm gauze throat pack and aim to fill the oropharynx and occlude the pharyngeal isthmus so that blood and irrigation fluid remain in and are aspirated promptly from the nasal cavities. We find on removal, the pack is only lightly blood stained with minimal change in weight (research in progress) and believe the chance of blood and irrigation fluid entering the oesophagus must thus be very small.

We have used the reinforced LMA for elective adenotonsillectomy<sup>2</sup> and found that the LMA protected the larynx from contamination with blood during surgery on the upper airway, in contrast to the tracheal tube, where aspiration occurred in 54% of children. Furthermore, during recovery from anaesthesia 91% of patients in the LMA group required suction to clear blood pooling in the mouth, compared with 66% in the Guedel airway group. This suggests that the LMA prevents blood from being swallowed or aspirated by the patient.

Secondly, in cases of difficult airway access, Fisher et al. state that the LMA is contra-indicated in patients whose tracheas are known to be difficult to intubate and whose lungs are difficult to ventilate. Our patient had no respiratory dysfunction, despite having ankylosing spondylitis. The LMA has been successfully used in cases of difficult intubation,<sup>3</sup> including repair of cleft palate in an infant with Pierre Robin syndrome,<sup>4</sup> and has been advocated as a guide to aid blind tracheal intubation in cases of difficult direct laryngoscopy.<sup>5</sup>

As Todesco et al. state, the LMA can be used to guide a tracheal tube blindly or under fiberoptic guidance into the trachea; and these are the methods we would have used in the unlikely event of urgent tracheal intubation being required.

We believe the LMA, used in conjunction with a throat pack (as described above), Moffett's Solution to minimize mucosal bleeding and simultaneous irrigation and aspiration, is a safe technique for nasal surgery.

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## The laryngeal mask airway and ocular injury

To the Editor:

The laryngeal mask airway (LMA) has already been documented for use on ophthalmic surgery<sup>1</sup> but not for ocular injury. A case is presented where an LMA was used to avoid the risk of further trauma to the eyes of a patient who had sustained bilateral penetrating eye injuries and required surgical treatment.

A 32-yr-old woman presented with bilateral perforating eye injuries. She had multiple lacerations and bruising of her face. Her left upper eyelid was lacerated exposing the proptosed eye-ball (Figure). On arrival in the anaesthetic room she was unpremedicated and starved. The patient was monitored with a pulse oximeter and pre-oxygenated. Anaesthesia was induced with thiopentone 225 mg, and alfentanil 1 mg which rendered the patient apnoeic. An airtight seal could not be attained with the



FIGURE Ocular injuries sustained including proptosis of the left eye.

face mask due to the position of protective eye-shields. It was not possible to remove these without the risk of further trauma to the eyes. An LMA was quickly prepared and inserted with ease. Inflation of the cuff produced an airtight seal and manual ventilation was then possible. Vecuronium 10 mg was administered and anaesthesia was maintained with nitrous oxide 70% in oxygen with isoflurane 1–2%. When the patient was fully paralysed the LMA was removed and a tracheal tube (TT) passed, under direct laryngoscopy.

At the end of surgery the eye shields were replaced. Anaesthesia was deepened and the residual neuromuscular blockade reversed with neostigmine 2.5 mg and glycopyrolate 0.5 mg.

Once spontaneous ventilation had resumed the TT was removed and the LMA reinserted. The patient then breathed 100% oxygen and the LMA was removed after the patient had awakened and obeyed verbal commands. There was no coughing, straining or breath-holding throughout the anaesthetic.

The use of the LMA was not anticipated to be part of the anaesthetic management of this case but proved to be a useful alternative to the facemask, for manual ventilation. Its use reduced the risk of further injury, from pressure, to the patient's proptosed eye-ball.

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## *L'électroencéphalogramme informatise en per-opératoire chez une patiente présentant une artérite de Takayasu (EEG monitoring and Takayasu's arteritis)*

À la rédacteur:

Nous avons lu avec beaucoup d'intérêt l'article de Beilin et Bernstein<sup>1</sup> sur la conduite anesthésique lors d'une césa-

rienne programmée chez une femme présentant une maladie de Takayasu.

Comme ces auteurs le rappellent, l'anesthésie générale est préférée chez ces patients car elle n'entraîne pas de sympathectomie. Toutefois, l'anesthésie régionale a été utilisée avec succès lors d'un accouchement par voie vaginale<sup>2</sup> et par césarienne<sup>1</sup> chez de tels malades. Elle a l'intérêt de surveiller la fonction cérébrale très facilement chez des patients réveillées. Ce dernier point est important car l'artérite de Takayasu peut atteindre les artères carotides. Nous voulons présenter le cas d'une femme de 44 ans, présentant une artérite de Takayasu, avec atteinte carotidienne, qui a subi une hystérectomie trans-abdominale. Nous lui avons administré avec succès une anesthésie combinée: générale et péridurale, en nous aidant, en plus du monitoring habituel, de l'électroencéphalogramme (EEG) informatisé. L'utilisation de ce type d'EEG permet une surveillance permanente du maintien du débit sanguin cérébral. Le Cérébrotrac 2500 que nous utilisons dans notre service présente une analyse de l'EEG sur deux hémisphères de façon symétrique.

Ce type de présentation a l'avantage de mettre en évidence toute asymétrie dans le spectre d'activité et facilité le diagnostic d'événements ischémiques unilatéraux.

D'autre part, l'anesthésie combinée, chez de tels malades ne desirant pas ou ne pouvant pas recevoir une anesthésie régionale seule, permet par l'intermédiaire du cathéter péridural, d'obtenir en post-opératoire d'excellents résultats aussi bien du point de vue équilibre tensionnel que de celui de l'algésie proprement dite.

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#### REPLY

We thank Drs. Gozal and Gozal for their interest and comments on our recent article.<sup>1</sup> We commend them for their successful management of a patient with Takayasu's arteritis (TA) with an electroencephalogram (EEG) to monitor for cerebral ischaemia. However, the use and benefits of EEG monitoring are controversial, as the EEG is a sensitive monitor for cerebral ischaemia, not a specific one.