

- 3 Macintosh RR, Mushin WW, Epstein HG. Diffusion and osmosis. In: Macintosh RR, Mushin WW (Eds.). *Physics for the Anaesthetist*, 2nd ed., Oxford: Blackwell Scientific Publications, 1958; 247-69.

#### REPLY

*Ventilation in patients with tracheal obstruction can create serious problems, particularly when the cross-sectional diameter of the trachea is narrowed to 5-6 mmHg. That is why the anaesthetic management and method of ventilation in our patient followed a step-by-step algorithm to ensure safety. The anaesthetic plan started by awake tracheal intubation, to be followed by spontaneous inhalation anaesthesia in 100% oxygen. Neuromuscular blockade and controlled ventilation were initiated after ensuring adequate jet ventilation.*

*In his letter, Dr. Agarwal should have agreed with us, rather than disagreed, since we shifted to controlled ventilation as soon as we ensured its safety.*

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## Tracheo-bronchial angles in infants and children

To the Editor:

We read with interest the correspondence on unintentional left main bronchus intubation by Ezri *et al.*<sup>1</sup> They described that the two main bronchi take off at the same angle from the trachea in children younger than three years quoting the 10th edition of *A Synopsis of Anaesthesia*.<sup>2</sup>

We demonstrated that tracheo-bronchial angles in infants and children are not the same, namely the angle of the right is smaller than that of the left as in the adult.<sup>3</sup> The 11th edition of *Lee's Synopsis of Anaesthesia*<sup>4</sup> revised the above description citing our paper.

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- 2 Atkinson RS, Rushman GB, Lee JA. *A Synopsis of Anaesthesia* 10th ed., Bristol: Wright, 1987; 221.

- 3 Kubota Y, Toyoda Y, Nagata N, *et al.* Tracheo-bronchial angles in infants and children. *Anesthesiology* 1986; 64: 374-6.
- 4 Atkinson RS, Rushman GB, Davis NJH. *Lee's Synopsis of Anaesthesia* 11th ed. Oxford: Butterworth-Heinemann, 1993, 234.

## Laryngeal mask airway in cardiac surgery

To the Editor:

Anaesthesia induction before cardiac surgery must be slow and deep to preserve haemodynamic stability and to avoid cardiac arrhythmias. During this time we must ensure patient oxygenation and ventilation and prevent gastric inflation. We use the laryngeal mask airway (LMA) after preoxygenation of the awake patient using a standard face mask as a step towards tracheal intubation. The LMA frees our hands for other tasks such as drug administration, record-keeping, haemodynamic monitoring or to ensure ventilation.<sup>1</sup> It is a good method to ensure the airway for deep anaesthesia with a minor haemodynamic and endocrinometabolic repercussion<sup>2</sup> and a gradual and safe anaesthetic level. Moreover, ventilation and its monitoring by the capnography are easier using LMA, and this is important in patients with lungs which are difficult to ventilate,<sup>3,4</sup> or with haemodynamic instability. We believe that these are advantages compared with ventilation using the standard face mask.

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- 3 Gilroy F. The laryngeal mask (Letter). *BMJ* 1993; 306: 580.
- 4 Brimacombe J, Berry A. The laryngeal mask (Letter). *BMJ* 1993; 306: 580.