there were no statistical differences between the evidence of pain after fentanyl or alfentanil (Table). We conclude that alfentanil is as effective as fentanyl in preventing the pain associated with the intravenous injection of propofol.

We thank ICI Pharmaceuticals for preparing the blinded ampoules, the nurses of the Department of Anaesthesia for their enthusiastic help and Dr. C.D. Hanning for his advice.

J.H.J.H. Helmers,* R.J. Kraaijenhagen,* L.v. Leeuwen[†] and W.W.A. Zuurmond[†]

*Department of Anesthesiology, Hospital "De Lichtenberg," Utrechtseweg 160, 3818 ES Amersfoort, The Netherlands. †Department of Anesthesiology, Academic Medical Centre, Meibergdreef 9, 1105 AZ Amsterdam, The Netherlands.

REFERENCES

- 1 Utting JE, Fahy Lv, Mourik GA. A comparison of thiopentone and propofol (Diprivan) for induction of anaesthesia. Postgrad Med J 1985; 61 (Suppl 3): 84.
- 2 Mundeleer P. The incidence and avoidance of pain on injection of propofol. Anaesthesia 1988; 43 (Suppl): 115.

The length of the blade is more important than its design in difficult tracheal intubation

To the Editor:

The interesting article by McIntyre¹ about laryngoscope design and difficult adult tracheal intubation did not mention a crucial factor of this subject: the importance of the length of the blade. We would like to describe a case in which a longer blade (in this case a Macintosh blade) changed a difficult into a simple intubation:

A 53-year-old man was admitted to the emergency room after a road accident. He was stable haemodynamically and suffered from fractures in his symphysis pubis. right hand and both legs. Three hours after his admission he was transferred to the operating room. Because the patient had eaten four hours before, a "crash induction" was planned. His weight was 75 kg, blood pressure 140/85 mmHg and heart rate 110 beats min⁻¹. He was given a defasciculating dose of pancuronium 1 mg IV and 500 mg thiopentone with 150 mg succinylcholine. The usual type of Macintosh blade was used but the epiglottis was not seen. During several unsuccessful attempts the oxygen saturation did not decrease below 93 per cent. Then the usual blade was changed to the longer Macintosh blade and the epiglottis and vocal cords were seen and a tracheal intubation was performed without difficulty.

The longer blade has a "double action" upon the epiglottis: it can lift it directly or indirectly. The shorter blade can only lift the epiglottis indirectly. It is recommended to use the longer blade in every case because difficult intubation is unpredictable.

Joseph Eldor MD Yaacov Gozal MD Department of Anesthesia Hadassah Medical Centre, Ein Karem Jerusalem, Israel

REFERENCE

1 McIntyre JWR. Laryngoscope design and the difficult adult tracheal intubation. Can J Anaesth 1989; 36: 94-8.

REPLY

The Macintosh blade is usually described as curved though the distal third is virtually straight – a particularly noticeable characteristic of the Welch Allyn product. Accordingly, the Macintosh functions as a straight blade that elevates the epiglottis directly or indirectly if the part of the blade in the mouth is that with little or no curve, or as a curved blade if the full length is inserted. The length of the blade selected is clearly important and the authors have provided a valuable example of how analysis of the problem and selection of the most suitable blade can make life easier.

J.W.R. McIntyre MD FRCPC Department of Anaesthesia Edmonton

Intercostal nerve block in obese patients

To the Editor:

Intercostal nerve block is useful in the treatment of intercostal neuralgia and for postoperative somatic pain following surgery of thorax and upper abdomen.¹ If the rib margin cannot be palpated due to obesity, satisfactory blockade may be technically difficult to achieve and the development of pneumothorax is a related complication.²

We have used disposable 32-gauge, 2-inch acupuncture needles with a glass insertion tube (MIC International Corporation, New York) to locate the ribs (Figure 1). When this needle is in place the regular 22-gauge block hollow needle is inserted beside it then walked off the rib before injection of the local anaesthetic solution (Figure 2). This technique has proved satisfactory for pain-free insertion and less traumatic location of the rib. In a series of 20 intercostal blocks performed in grossly obese patients, no pneumothorax as determined by chest x-ray or other complications occurred.