

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.

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- 2 Mundelee 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 McIntyre<sup>1</sup> 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<sup>-1</sup>. 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.

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- 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.*

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## *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.<sup>1</sup> 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.<sup>2</sup>

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.

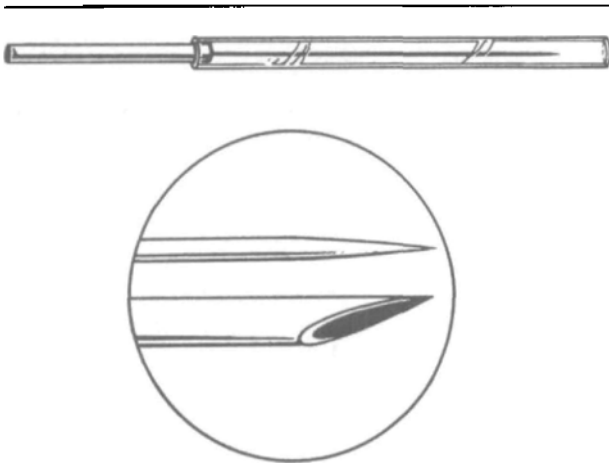


FIGURE 1 Acupuncture needle with a glass insertion tube. Note the difference in tip compared with a regular hollow block needle.

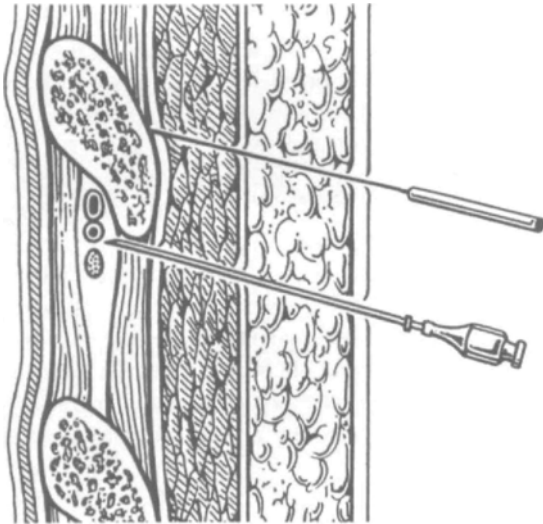


FIGURE 2 Localization of a rib with acupuncture needle prior to intercostal nerve block.

In cases of truncal obesity, placement of acupuncture needles may also prove useful in locating the first rib prior to supraclavicular block or to localize ribs before insertion of an intrapleural catheter for postoperative pain relief.

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- 2 Moore DC, Bush WH, Scurlock JE. Intercostal nerve block: a roentgenographic anatomic study of technique and absorption in humans. *Anesth Analg* 1980; 59: 815-25.

## Atropine-neostigmine mixture

To the Editor:

The recent study of Naguib and Mohammed<sup>1</sup> leaves me dissatisfied. These investigators studied the doses of atropine required to prevent neostigmine (0.04-0.06 mg · kg<sup>-1</sup>) from lowering the heart rate below baseline (pre-reversal) in 50 and 95 per cent of patients after antagonism of nondepolarizing neuromuscular blockade with neostigmine-atropine mixtures. They estimated that the ED<sub>50</sub> and ED<sub>95</sub> values for atropine were approximately 0.035 and 0.055 mg · kg<sup>-1</sup> respectively. They conclude that "appropriate doses of atropine when used with neostigmine should be greater than that commonly used."

First, I am not sure that the authors have asked the right question. Is *any* decrease in heart rate from "control" really of clinical significance or a valid definition of bradycardia? For example, in group A-1 the decrease in mean heart rate from a baseline of 92 to a low of 70 per minute may be statistically significant and real, but is it important? Of far greater interest is the actual number or percentage of patients who manifested heart rates of less than 60 or at least some fixed standard. In addition, in constructing their "dose-response" relationships the authors have not differentiated between large and small changes in heart rate. A decrease from 90 to 60 · min<sup>-1</sup> was given the same weight as a decrease from 80 to 70. This is simply not a sensible approach.

Second, if "commonly used dosages" are not appropriate, what practical recommendations do the authors make? Do they suggest that doses of atropine of 0.05 to 0.06 mg · kg<sup>-1</sup> should be employed clinically? This is the implied message of the paper and I think a potentially dangerous one. The central nervous system effects of 4 mg of atropine in a 70 kg adult deserve to be mentioned. If the authors really believe that prevention of *any* decrease in heart rate is a desirable goal and that these doses of atropine are warranted, then the virtues of glycopyrrolate vs atropine must also be discussed.

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