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Endobronchial intubation

To the Editor:

We were very interested to read the letter of John Oyston entitled "Detecting endobronchial intubation during breast surgery" (*Can J Anaesth* 1997; 44: 1129). The use of a "bagged" stethoscope is ingenious and logical. We would have doubted that breath sounds could be heard but obviously there was enough solid contact for satisfactory sound transmission, and we thank Dr. Oyston for the lesson in auscultation.

Endobronchial intubation is the commonest reason for desaturation as was shown in the Australian Incident Monitoring study.¹ It is also of interest that, for Dr. Oyston, the $P_{ET}CO_2$ was unchanged and this is consistent with our findings where capnography was found to be unhelpful in 88% of incidents.

Obviously prevention is the best course. For this reason, in our analysis, we advocated the use of a tracheal marking 3 cm above the upper edge of the cuff. If this mark which identifies the 3, 4, and 5 cm points (Figure) is clearly visible above the vocal cords then the cuff is just below the cricoid ring and the risk of endobronchial intubation is avoided. It has been used in Australia on Curity (Kendall) tubes (7 mm - 9 mm) since mid 1997. The marks are a guide for both oral and nasal tubes as they are referenced to the vocal cords.

A number of authors have advocated single marks on the tracheal tube but only this mark defines the critical 3 to 5 cm above the cuff to ensure the highest

FIGURE Illustration of tracheal tube marking to assist in positioning the tube in the trachea. Normally, in adults, the vocal cords should be positioned as shown. If any upward movement is anticipated during anaesthesia, a deeper insertion to 4 or 5 cm may be appropriate. It should rarely be necessary to insert the tube deeper. These marks are appropriate for both oral and nasal intubation.

possible position of the tube in the anaesthetized patient. The general suitability of the marks is why we are recommending it to the International Standards Organization Technical Committee 121 which deals with standards for tracheal tubes.

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 E.P. McCoy
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