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Para-tracheal Audible Respiratory Monitor (PTARM)

To the Editor:

The use of a precordial or oesophageal stethoscope to monitor breath sounds during anaesthesia is an established method for detecting failure of ventilation due to any cause. However, the need for the anaesthetist to be connected to the stethoscope tubing can interfere with the performance of other anaesthetic duties.

We have found the Para-Tracheal Audible Respiratory Monitor (PTARM) to be more informative than precordial or oesophageal stethoscopes in the early detection of respiratory obstruction or depression. PTARM is especially valuable in the CT scan room, the intraoperative irradiation room or any other location where the anaesthetist is of necessity forced to remain at some distance from the patient. It can also be used to monitor the patient's breathing in the Recovery Room. This device frees the anaesthetist from the earpiece and connecting tubing that limit movements about the patient. It also allows all anaesthesia personnel in the room to monitor the patient's breath sounds simultaneously.

FIGURE Lateral (right) and frontal (left) view of microphone and its holder.

The PTARM is comprised of a condenser microphone (Sony, Japan, Model 0604), plus a preamplifier, an audio-amplifier and a loudspeaker. The preamplifier and audio-amplifier are both included in a consumer's audio-kit (Decad Electronics, Tel Aviv, Israel) which uses a 2N5089 transistor and a TDA 2003C audio-amplifier chip (Fairchild Camera & Instrument, Mountain View, California)). We have used a three-inch loudspeaker.

The holder and the flexible band (Figure) were designed for convenience of use when applied for long durations.

The PTARM can be used as a respiratory monitor in any anaesthetized patient breathing spontaneously or ventilated through an endotracheal tube. The broadcast of the audible sounds of air movement allows the anaesthetist to continuously monitor ventilation, without the disadvantage of the physical restrictions imposed by precordial or oesophageal stethoscopes.

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Anaesthesia for Treacher Collins Syndrome

To the Editor:

I read with interest the article "Anaesthesia for Treacher Collins and Pierre Robin Syndromes: a report of three cases" by Rasch *et al.*¹ I have had extensive experience