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COMMENT

Thank you for the opportunity to reply to Dr. Ghani's letter. The test Dr. Ghani describes points out again how important it is to check breathing circuits for proper function before each use.

I routinely visually inspect each circuit to assure that the blue inner tube does extend from the patient end connector to protrude slightly outside the circuit at the fresh gas connecting nipple. I then personally connect the circuit to the gas machine and perform the Pethick test and finally pressurize the circuit to 30 cm of water pressure for a few seconds to assure there are no significant leaks. This routine testing takes about 20 seconds. Perhaps now I will include the Ghani test and the Foex-Crampton Smith manoeuvre. Both tests are easily performed and give further assurance the inner tube of a Bain Breathing Circuit® is intact. The Foex-Crampton Smith manoeuvre also nicely checks the integrity of the hard circuitry of the gas machine from the connection at the fresh gas nipple of the circuit back to the rotameters. I would encourage all readers to look up the original publication on the Foex-Crampton Smith manoeuver, as it makes delightful reading!

The inner tube of the Bain Breathing Circuit is recessed at the patient end thus necessitating the use of a plunger from a 2 or 3 ml syringe to carry out the Ghani test or the Foex-Crampton Smith manoeuvre. The inner tube is recessed to prevent obstruction to exhalation by the elbow connector or the endotracheal tube connector. The minimal dead space is of no consequence even to the premature baby.

Finally I would like to emphasize that everyone must routinely carry out safety checks of any anaesthesia circuit before each use to assure its proper function.

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Oxygen monitoring of bleomycin-treated patients

To the Editor:

Oxorn, *et al.*,[1] discussed an important aspect in the anaesthetic management of the surgical patient previously treated with bleomycin. Although our experience with these patients undergoing thoracotomy[2] suggests that they do tolerate higher FiO_2's than previously recognized,[3] like Oxorn *et al.*, it is still our practice to administer the lowest concentration of oxygen compatable with safe levels of arterial oxygenation.

Oxorn *et al.* described their experience with an indwelling in vivo arterial oxygen tension monitoring system. They detailed the potential hazards of intra-arterial cannulation as well as the very real shortcomings of other methods of oxygen monitoring. Their article failed to mention an accurate, non-invasive oxygen monitor that is currently available. We now use a pulse-oximeter (Nellcor, Hayward, CA) for continuous monitoring of oxygenation on our high risk patients. Unlike the less dependable ear oximeters, the Nellcor device uses a sensor that is easily wrapped around any pulsating artery. For convenience we use a finger. The monitor digitally displays arterial hemoglobin-oxygen saturation (SaO_2), and is extremely accurate over a wide range of hemodynamic conditions.[4] For bleomycin-treated patients, we use the lowest "safe" amount of supplemental oxygen as determined by reducing the FiO_2 until an SaO_2 of 90–95 per cent is reached. Non-invasive finger pulse oximetry is an ideal means of continuously monitoring patients at risk for hypoxemia or for oxygen toxicity such as the bleomycin-treated patient described by Oxorn.

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