


(Accepted for publication October 1, 1992.)

Undetected Leak in Corrugated Circuit Tubing in Compressed Configuration

To the Editor.—We report an incident involving a disposable anesthesia circuit. The original compressed configuration of the circuit’s corrugation showed no sign of a leak during a preoperative positive pressure test. However, after intravenous induction of general anesthesia, the tubing corrugation was extended and a previously undetected flaw in the circuit (fig. 1) became the source of a major leak. Ineffective positive pressure ventilation ensued, leading to a decline in the patient’s hemoglobin oxygen saturation (SpO2). The circuit was abandoned for an ambulance until the leak was identified and the circuit replaced. We suggest doing a preoperative positive pressure leak test with this type of circuit in the fully extended configuration to detect potential flaws in the circuit that might otherwise be missed.

Douglas J. Reinhart, M.D.
Department of Anesthesia
Clinical Faculty, University of Utah
2571 South 1825 East
Ogden, Utah 84401

Ralph Friz, M.D.
Director of Anesthesia
McKay-Dec Surgical Center
5903 Harrison Boulevard
Ogden, Utah 84409

(Accepted for publication October 15, 1992.)