CORRESPONDENCE

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# Gender Bias Influences Interpretation of Research Results

*To the Editor:*—I applaud the work of Bailey *et al.*,[1] which methodically analyzed the respiratory effects of graded doses of intrathecal morphine in normal, nonsurgical subjects. My only criticism with this elegant work is that the title should have reflected the fact that this study group consisted of 20 healthy *male* volunteers.

It is now well known that females, with their variable levels of circulating progestins, have differing responses to ventilatory challenges. Premenopausal females demonstrate cyclical patterns of ventilatory drive that mirror their own levels of circulating progesterone.[2] In addition, women or men who receive exogenously supplied progesterone also display an interesting ventilatory increase.[3,4] Finally, all anesthesiologists are well aware of the decrease in $Pa_{CO_2}$ that accompanies pregnancy.

Many anesthesia practices have a large percentage of females who might benefit from intrathecal morphine. However, one should not generalize from the study population in this article to this female group. Only after further careful scientific study, can we be confident that the recommendations offered by these authors are applicable to all members of the population.

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## References

1. Bailey PL, Rhondeau S, Schafer PG, Lu JK, Timmins BS, Foster W, Pace NL, Stanley, TH: Dose–response pharmacology of intrathecal morphine in human volunteers. ANESTHESIOLOGY 79:49–59, 1993
2. Dempsey JA, Olson EB, Skatrud JB: Hormones and neuralchemicals in the regulation of breathing, Handbook of Physiology. Volume 2. Control of Breathing. Part 1. Edited by Fishman AP, Cherniack NS, Widdicombe JG, Geiger SR. Bethesda, American Physiological Society, 1986, pp 181–221
3. Goodland RL, Reynolds AB, McCord AB, Pommerenke WT: Respiratory and electrolyte effects induced by estrogen and progesterone. Fertil Steril 4:300–316, 1953
4. Milne JA, Pack AI, Coutts JR: Gas exchange and acid-base status during the normal human menstrual cycle and in subjects taking oral contraceptives. J Endocrinol 75:17P–18P, 1977

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# Disposable Circuit Disconnects

*To the Editor:*—We report two cases of partial circuit disconnection using expandable anesthesia breathing circuits that have "slip fit connections" (Intertech, Lincolnshire, IL; fig. 1). On both occasions, after successful anesthesia checkout procedures (pressurization of the circuit and circle system), the tubing was expanded by hand to achieve the necessary length. In no case was the expansion of the circuit excessive. Expansion of the circuit was completed by pulling the patient adaptor and the corrugated tubing nearest this portion of the adapter. In both cases, separation occurred at this junction, referred to as the "slip fit connection" (fig. 2). The manufacturer has placed these adapters at this site to allow for rotation of the tubing to prevent the formation of kinks. In addition, this adapter was designed to be easily snapped off and snapped back in place should the clinician wish to remove this portion of the circuit.

The package insert does not mention the possibility that this disconnection might occur. Furthermore, we cannot identify any product designed that might be placed at this site (*i.e.*, it is not a standard 22-mm coaxial fitting site ASTM Specification F 1054*). Also, the manufacturer gives no instructions as to how to expand the tubing. Expansion at the junction of patient adapter and the corrugated tubing may cause this connector to partially disconnect, and thus the recommendation might be made to expand the circuit at the tubing sections only and then recheck the integrity of the circuit.

* Annual Book of ASTM Standards: Standard Specification for Anesthesia Breathing Tubes. Volume 13.01,535.