

Lichtiger *et al.* incorrectly interpreted or extrapolated from the data in those two articles.

There is some controversy over the humidity needed in inspired air. In rats, Dalhamn found that ciliary function remained normal following exposure for one hour to 70 per cent R.H. and following more than two hours of exposure to 100 per cent R.H. at ambient temperatures (approximately 15 to 22 mg/l).² Forbes found in dogs that at least a 75 per cent R.H. at 37 C (approximately 33 mg/l) was necessary to maintain mucous flow.⁴ Since the duration of the Lichtiger study was less than two hours, the effect of humidity on ciliary activity may not have been a factor,^{3,4} but it could have been controlled to minimize the variables of the study.

Furthermore, although all patients studied by Lichtiger *et al.* were given atropine, a drug known to alter ciliary function, the possible effect of this on the results was not discussed. Burton and Lond, for example, have reported that atropine given intramuscularly one hour before operation influences ciliary propulsion for at least two hours.⁵ Further, Han and Lowe have reported an increase in expired water loss during an experiment using atropine.⁶ Again, use of atropine may not have influenced the results or conclusions in the Lichtiger article, but it is another factor affecting ciliary function that could have been controlled, or at least a factor the effect of which should have been considered.

Lichtiger, Landa and Hirsch are to be congratulated on the technique that they have reported for measuring ciliary motility,

since the clinical protection of ciliary morphology and function during anesthesia needs more exacting methods to establish requirements of humidification of anesthetic gases as well as the detrimental effects various drugs used in the course of anesthesia. I hope that they will repeat their work with more controls, since such information is needed.

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Perinatology

PLACENTA-TO-INFANT TRANSFUSION

An accurate method for measuring residual placental blood volume (RPBV) has been developed. This method was used in 33 normal vaginal deliveries and 18 cesarean section deliveries in which the umbilical cord was clamped 5 to 118 seconds after delivery. Infants born vaginally received 10 to 20 ml/kg body weight of placental transfu-

sion when the umbilical cord was not clamped until 30 seconds or more after delivery. Equivalent delay of umbilical cord clamping in cesarean section infants produced no placental transfusion. (Kleinberg F, Dong L, Phibbs RH: Cesarean Section Prevents Placenta-to-infant Transfusion Despite Delayed Cord Clamping. *Am J Obstet Gynecol* 121: 66-70, 1975.)