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Superficial Temporal Artery Cannulation in Adults

To the Editor:—The superficial temporal artery has long been recognized by anesthesiologists as a readily accessible site to assess and monitor pulse rate, rhythm, and pressure. Superficial temporal artery cannulation for intraarterial pressure and laboratory monitoring has been used and described in the pediatric literature without mention of any serious complications or permanent sequelae.¹⁻³ However, after review of the literature, we were unable to find its use reported in adult patients.

We recently cannulated the superficial temporal artery of a 58-year-old woman to allow perioperative monitoring for surgical correction of a right innominate artery stenosis. This site was chosen because there were no palpable upper or lower extremity pulses. We encountered no complications or sequelae. The superficial temporal artery in the adult is an easily accessible superficially palpable artery with extensive collateral circulatory protection and may be used as an alternative arterial monitoring site, when necessary.

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Inadvertent Inspiration of Carbon Dioxide

To the Editor:—If ignorance is bliss, then awareness must not be. While our modern technologic sensors come sometimes at a considerable price, on occasion they pro-

vide insights that give us pause in regard to the unheralded sins of our more blissful past. We would like to recount one such recent event.

For some months now our University Hospital has enjoyed the presence of a centralized mass spectrometric monitoring system (Perkin Elmer) permitting sequential sampling of airway gases from patients in each operating room. Recently, in one anesthetizing location, several anesthesia personnel observed that the inspired P_{CO_2} was elevated, varying from time to time within a range of 15 to 23 mmHg. The inspired P_{CO_2} was undiminished by converting to a high-flow system and occurred with both spontaneous and controlled ventilation. The problem was not present in any other anesthetizing location and was determined to be within the anesthesia delivery system rather than the monitor. The CO_2 absorbent showed no color change, replacement with fresh soda-lime did not resolve the problem, and sampling gas at the proximal end of the inspired limb confirmed that no carbon dioxide

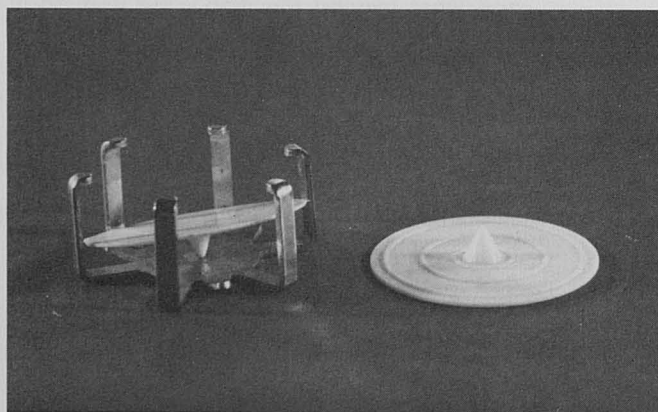


FIG. 1. Directional valve disc of Ohio Model 20® circle system. Proper position relative to enclosing basket is shown on left.