

added influence of suction were determined. Endotracheal tubes, suction catheters and suction all interfere with inspiratory flow by increased resistance, and all lengthen the duration of the inspiratory effort. The larger the endotracheal tube, the less the resistance. The reverse is true of the suction catheter.

The relative efficiency of several commercially available suction catheters were deter-

mined and compared with a laboratory standard. It appears that the side arm capacities of commercial suction catheters need improvement.

Reference

1. Rosen, M., and Hillard, E. K.: The use of suction in clinical medicine, *Brit. J. Anaesth.* 32: 486, 1960.

Drugs

NEUROLEPTANALGESIA The neuroleptanalgesic drugs dehydrobenzperidol and phenoperidine were used alone and in combination for 65 patients undergoing routine diagnostic cardiovascular investigations. Satisfactory sedation was obtained in 11 of the 65 patients using dehydrobenzperidol alone. The remainder required the addition of phenoperidine to obtain adequate sedation. Significant respiratory depression was noted after phenoperidine was administered. Dehydrobenzperidol resulted in widespread vasodilation of the systemic and pulmonary circulatory beds, probably due to a direct effect on resistance vessels. The drug reduced pulmonary pressures to normal when they had previously been raised. Systemic blood pressure fell in many instances but was not associated with the reflex increase in heart rate or cardiac output, possibly owing to catecholamine antagonism by dehydrobenzperidol. It was concluded that dehydrobenzperidol may invalidate the hemodynamic conclusions, particularly as they relate to the pulmonary circulation in patients undergoing cardiovascular investigations. (*MacDonald, H. R., and others: Clinical and Circulatory Effects of Neuroleptanalgesia with Dehydrobenzperidol and Phenoperidine, Brit. Heart J.* 28: 654 (Sept.) 1966.)

NEUROLEPTANALGESIA One hundred and fifty patients were premedicated with droperidol. Anesthesia was induced with an intravenous drip, using a 250 ml. bottle of fluid containing 25 mg. droperidol and 0.5 mg. fentanyl citrate. Induction took 10 to 15 minutes. Intubation was accomplished easily with or without relaxants. Depth of anesthesia was judged by blood pressure, pulse rate and patient response. Premedication effect of droperidol was excellent, with an average dose of 5 mg., (range 2.5 mg. to 12.5 mg.). The greatest amounts of drugs were used for induction, so total dose was not directly related to duration of operation. During maintenance, small doses of the individual drugs were used. The average total doses were: droperidol 21 mg. and fentanyl citrate, 0.73 mg. Transient hypotension developed in 4 patients. Severe bradycardia occurred once and was corrected by use of atropine. Respiratory depression was common, but patients breathed on command or were on controlled respiration. Chest-wall rigidity did not occur. Postoperative absence of pain and nausea were remarkable and there were no psychoses or extrapyramidal disturbances. Four patients had some recollection of the operation. (*Fox, J. W. C., Fox, E. J., and Crandell, D. L.: Neuroleptanalgesia for Heart and Major Surgery, Arch, Surg.* 94: 102 (Jan.) 1967.)