ABSTRACTS

Editorial Comment: A fixed style of presentation for this department of Anesthesiology has purposely not been defined. It is the wish of the Editorial Board to provide our readers with the type of abstract they desire. Correspondence is invited offering suggestions in regard to the length of abstracts, character of them, and source of them. The Board will appreciate the cooperation of the membership of the Society in submitting abstracts of outstanding articles to be considered for publication.

Comdr. James G. Kurfees; Lieut. Scott Whitehouse, and Lieut. Frank Corzismo, Medical Corps U. S. Navy: 

A report on 142 anesthesias administered to 40 paraplegic patients who, through injury, had suffered complete or partial paralysis of lower extremities with varying degrees of dysfunction of bowel and bladder. The cervical region was involved in 14 cases, thoracic in 30 cases, and lumbar in 5.

The two most important problems in preoperative assessment for the anesthesiologist are cited to be: (1) The state of malnutrition with low hemoglobin and plasma protein levels seen in many paraplegics. Patients with less than 6 to 8 grams plasma protein per 100 cc. or with hemoglobin below 80% were given transfusions of whole blood. (2) A pronounced emotional instability due to the patients dependance on others; this makes it of utmost importance to gain his confidence by discussing with him the purpose and method of anesthesia.

The paraplegic patient has a low pain threshold and often requires analgesics over a long period of time; thus, larger doses of depressant drugs are required for premedication.

The agents used were: ether; nitrous oxide; thiopental sodium. The authors express the belief that in expert hands any agent with suitable technic can be used in paraplegic persons if such fundamental physiological and pharmacological principles as adequate fluid therapy, oxygenation and maintenance of blood pressure are observed.

Inadequate oxygenation due to paralysis of respiratory muscles, or due to the position of the patient during operation or a combination of these factors, or increased abdominal pressure hampering a diaphragm which is already only partially functioning, must be foreseen and combated. Assisted respiration and appropriate weight distribution, using rolled sheets from clavicle to ant. sup. iliac spine in the prone position were used. Continued weight bearing on bony prominence cannot be maintained for more than two hours without risk of pressure necrosis unless particular attention is paid to padding.

Because of the high incidence of renal calculi adequate fluids for renal function must be given during surgery. Pressure on rubber bags connected to indwelling catheters will distend the bladder and cause several hours postoperative discomfort.

In the postoperative period the ineffectual cough due to pre-existing respiratory deficiencies makes it necessary to be sure that by thorough tracheo-bronchial aspiration adequate pulmonary exchange is present in both lung fields. Ward personnel must be skilled in preserving the airway, adjusting the position and recognizing impending shock.

One case of atelectasis that recovered
was the only anesthetic complication encountered. One case of meningismus following lamineotomy, one case of pneumothorax during nephrolithotomy following inadvertant injury of the diaphragm and one case of postoperative shock occurred.

D. K. K.


In this entertaining comparison of the arts of music and anaesthesia Dr. Gillespie has drawn in three "movements" and a coda a kind of contrapuntal analogy of the two arts. Those of us who have been indoctrinated in the impersonal, scientific approach of modern medicine are reminded that great music is not simply impeccable harmonies or the display of irreplaceable technique. In the practice of anaesthesia today we have neglected the personal side of our work. The anaesthetist must be learned in theory and skilled in technique, but, like the musician, he should also have a profound knowledge and understanding of his fellow men. Without appreciation of these human values his relationship with his patients and colleagues cannot be truly harmonious.

J. H. M.


This excellent little article will probably be read by as many as read the J. A. M. A., which makes it especially valuable. Doctor Gordon writes in a simple, forthright style of the dangers that every anesthesiologist knows as well as his own name—but which all too few surgeons and other physicians recognize as important. The welter of complicated ideas about operating room disasters would be partly clarified if more articles of this type appeared in widely read non-specialty journals.

The article would serve equally well as the basis for a lecture to senior medical students.

W. A. C.


"Anesthesia in children presents many problems which differ from those of anesthesia in adults. . . . The normal basal metabolic rate is 20 per cent higher in the six year old than in a normal young adult. This is increased by fear, excitement, and each degree of fever raises it 7 per cent. The child thus presents a problem in preoperative medication which requires careful consideration, as the first purpose of the medication is to reduce this irritability. Opiates depress metabolism directly and also allay pain. However, they are respiratory depressants. . . . If closed technique is used, opiates are excellent, as rebreathing or bag pressure can be used to combat the depression. . . . The rapidly acting barbiturates are excellent for preoperative medication, and are the drug of choice in the infant as well as the older child who is to have open drop ether anesthesia. Often doses too small to produce obvious drowsiness give a complete amnesia which is very desirable.

"Avertin is a very satisfactory basal anesthetic agent, especially valuable for use before a prolonged operation. . . . Dosage of drugs cannot be standardized for any age group. . . . In general a child requires a larger dose in proportion to his size than does the adult. . . . In choosing between open and closed technique, one must remember that the small child may tire easily from exertion in breathing, and the resistance of long breathing tubes and a large soda lime cannister may be fatiguing. Slight pressure on the breathing bag during inspiration aids in preventing fatigue, and gives better lung ventilation. On the whole, however,