

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.

BOURNE, WESLEY: *Guest Editorial, Post-Graduate Education in Anaesthesia.* Virginia M. Monthly 75: 1-3 (Jan.) 1948.

"... Those who have to do with the teaching of anaesthesia are emphasizing the importance of some special knowledge of anatomy, of biochemistry, of pharmacology, and of physiology. . . . Medical schools are paying more and more attention to the teaching of anaesthesia. . . .

"With the growing tendency towards a better appreciation of the necessity of good anaesthesia, of greatest importance is the post-graduate course. . . . It may suffice briefly to describe the organized Three-year Diploma Course which functions in the department of anaesthesia at McGill University. . . . The aspirant must have had one year of internship in an approved hospital. . . . Throughout the three years the candidate resides in one of six hospitals moving from one to another every six months. In this rotative manner the individual gains a diversity of experience under the tutelage of many qualified anaesthetists. . . . Such a course enables the participant to prepare for the Diploma in Anaesthesiology of The Board of Anaesthesiology of the American Medical Association, for the Diploma in Anaesthesia of The Royal College of Physicians and Surgeons of England, and/or, for certification in anaesthesia by The Royal College of Physicians and

Surgeons of Canada. . . . From the research point of view, one or more of those who have taken this course are carefully chosen from time to time to carry out investigation in anaesthesia. . . .

"All through the course there are weekly seminars and symposia. . . . Occasionally each year guest speakers . . . are brought on from other universities. Each member is obliged to write a thesis on an allocated subject. . . . Early in the course . . . ancillary courses are given on topics of the basic sciences as these pertain to anaesthesia. . . .

"In anatomy fifteen afternoons are spent in the laboratory under the direction of the Professor or his Associate and the course comprises: 1. The anatomy of the respiratory tract with special reference to tracheotomy, intubation, etc. 2. The vertebral column, vertebral canal, spinal cord and the meninges. 3. The general course and distribution of the peripheral nerves. 4. The cranial nerves. Special attention is paid to the sites where each nerve is available for injection, the anatomy and surface landmarks of such sites, advantages and disadvantages of alternate sites, hazards of each and safeguards to be taken, anaesthetic area resulting from each block, common variations and possible sources of partial failure. . . . The students carry out the injections on the cadaver, and have to verify that the point of the

needle actually reached the desired spot. . . .

“ . . . In the department of biochemistry . . . the following schedule is . . . in operation: 1. Blood—Present knowledge of blood preservation; trends in the operation of hospital blood banks and in the distribution of blood to hospitals; new developments in apparatus for collecting, storing, and administering blood. 2. Blood Substitutes and Blood Groups—Current views on so-called blood substitutes; use of preserved blood serum, plasma, albumin and globin; survey of blood groups and types. Laboratory demonstrations on technique of blood-typing. 3. The Rh Factor and Its Clinical Significance—Present knowledge and trends. 4. Body Water and Electrolytes—Review of salt and water metabolism. 5. Nutrition—Basic considerations in energetics and nutrition. 6. Liver Function and Liver Damage—Critique of various tests of liver function; factors which cause liver damage; renohepatic relationship. 7. Kidney Function—Current concepts of function and factors that lead to impairment. 8. Protein Metabolism in Disease—Disturbance in nitrogen metabolism after trauma; treatment—restoration of nitrogen balance.

“In . . . pharmacology six one hour periods are devoted to . . . actions of various drugs used in anaesthesia. Particular attention is paid to the opiates, the barbiturates, drugs used for regional anaesthesia, curare preparations, and the anaesthetic drugs. . . .

“The course in physiology consists of lectures and demonstrations followed by laboratory periods in which the saline points of the lectures are studied experimentally. Six afternoons of three hours each are given over to this work. . . . The main attention is directed to three major systems most directly implicated in anaesthesia: (1) The nervous system, (2) the respira-

tory system, and (3) the cardiovascular system. Under the first are treated the problems of Pain, Sleep and Unconsciousness, Muscular Tone and Relaxation, and the Autonomic System. For the second are subsumed Mechanical Factors, Nervous Control, and Chemical Control. The third is divided under the headings of The Heart, and The Blood Pressure.”

D. D. G.

HILL, E. F., AND HUNTER, A. R.: *Death on the Operating Table*. Brit. J. Anaesth. 21: 24-31 (Jan.) 1948.

“Death on the table is fortunately not a common accident but its rarity makes it all the more difficult to obtain any definite information concerning its causation. . . . We have therefore collected from the records of the hospital which we serve the details of all the deaths which have occurred under anaesthesia in the last 14 years. In all 77 patients died on the table in this period. In a few cases no adequate explanation of the accident could be obtained from the information available, but in most the cause of death was clear enough. . . .

“In the 10 cases of death under spinal anaesthesia the anaesthetist was in the vast majority a recently qualified house surgeon. All the patients were poor risks. The solutions were heavier than the cerebrospinal fluid and if the technique taught (viz. 3° to 5° Trendelenburg position with the head raised) was used there could be no possibility of the paralysis of the phrenic roots by the direct action of the solution. The cause of death must therefore be sought elsewhere than in respiratory paralysis, and in fact there were no records of this phenomenon. That the proximate cause of these catastrophes was heart failure seems to admit of no doubt, but as a spinal anaesthetic has no direct action on the myocardium the question arises as to