Medical Memoranda

Primary Cerebral Sinus Thrombosis

In view of the interest recently shown in this subject, especially in this *Journal* (see bibliography), the following non-puerperal case of "primary" cerebral sinus thrombosis seems to merit publication.

CASE REPORT

The patient, a single woman aged 30, of asthenic build, was admitted to hospital suffering from restlessness and mental confusion. She had been in bed for 2 to 3 weeks at home with "bronchitis." Whilst in bed she developed left and, subsequently, right femoral thrombophlebitis. Mental symptoms were present during the last few days. There had been no vomiting and no previous illness. She had recently changed her occupation, and was depressed and "run down" owing to unhappiness at work.

On examination her condition was as follows: conscious but confused; headache severe; temperature 101°, pulse 106, respirations 28; slight residual swelling of ankles; no acute phlebitis; both knee-jerks slightly exaggerated; blood pressure 115/70; ears and fundi normal. Nothing else abnormal was observed in any system. Investigations on June 11, 1942, showed:—Lumbar puncture: pressure increased, Queckenstedt's test normal, C.S.F. examination normal in every respect. Nothing abnormal in urine. Non-protein nitrogen 26 mg. per 100 c.cm. Blood Wassermann reaction negative. Blood culture, coliform bacilli. All agglutination reactions negative. By June 15 she had developed a positive Kernig's sign, slight neck rigidity, and left extensor plantar response. Limb movements were apparently completely normal. Radiographs revealed skull and chest to be normal. A differential white count disclosed marked lymphocytosis. Pyrexia continued despite sulphonamide therapy. On June 17 lumbar puncture showed: pressure increased; C.S.F. contained numerous red cells, but otherwise was completely normal. Blood film, normal. Faeces, nothing abnormal.

The persistent normality of the majority of the investigations was puzzling, especially in view of the complete absence of any sign of paralysis or convulsions, but the possibility of thrombosis of the superior longitudinal sinus was entertained. The patient, however, became very considerably weaker and more drowsy, and she died on June 24.

Post-mortem Examination.—C.S.F. yellowish, not turbid; no evidence of meningitis; massive thrombosis of superior longitudinal and both lateral sinuses (apparently an aseptic thrombosis); bilateral thrombosis of superficial cerebral veins; no changes elsewhere in the brain; no necrosis, no hydrocephalus. The thromboses gave a definite impression of having originated in the superior longitudinal sinus, and of having spread thence to the lateral sinuses and to the superficial cerebral veins. Ears, nose, and throat, normal. Chest: purulent bronchitis, lungs normal. Abdomen: bilateral thromboses of common and external iliac veins, continuous with clot in both femoral veins; kidneys somewhat fibrosed; spleen normal; liver contained focal necroses. Bone marrow somewhat hypoplastic. Other organs normal.

DISCUSSION

This case seems to bear out the interesting suggestion of Martin (1941), arising out of the work of Batson (1940): the possibility of "metastatic" thrombosis of the cerebral sinuses, via the vertebral veins, arising from the pelvic veins. Batson specifically mentions that this would be apt to occur during coughing—it is noteworthy that the initial complaint in this case was "bronchitis." The absence both of convulsions and of paralysis is distinctly unusual; this may perhaps conform to the impression gained at necropsy that the venous thrombosis developed subsequently to the superior longitudinal sinus thrombosis, possibly only immediately before death.

I should like to express my thanks to Dr. H. C. Haslam-Fox, medical superintendent, for permission to publish this case, and to Dr. R. Y. Dawbarn, who performed the necropsy, for the pathological reports.

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Reviews

WAR INJURIES OF THE CHEST

War Injuries of the Chest. Edited by H. Morriston Davies, M.Ch., F.R.C.S., and Robert Coope, M.D., F.R.C.P. (Pp. 131. 6s. plus 6d. postage.) Edinburgh: E. and S. Livingstone. 1942.

In the literature on war wounds in general there has been a gap covering the treatment of chest injuries which could only be filled, and that incompletely, by reference to scattered articles and papers. The editors of this book have attempted to remedy the situation and to produce a concise account of the treatment of chest injuries for the use of officers in the field and at casualty hospitals. In this they have partially succeeded.

The book is well arranged and begins with a useful account of the special anatomy, physiology, and pathology of chest injuries, but this is somewhat marred by inaccurate diagrams of the bronchial tree and the broncho-pulmonary segments. Later chapters are concerned with the treatment of special injuries and contain much that will be disputed by those who have had practical experience of chest casualties. For instance, the statement that "so long as a patient is in need of resuscitation he is not fit to be x-rayed" is not confirmed by experience, for an essential x-ray examination causes little disturbance if a portable machine is used. Again, the authors are unduly afraid of operating on a shocked patient and, in consequence, their indications for primary operation are too few; but experience has shown that with skilled anaesthesia and continuous resuscitation the patient's condition improves steadily during any operation which relieves his circulatory and respiratory embarrassment. The chapters on haemothorax leave much to be desired: few would agree that a sterile haemothorax should be washed out with saline, that a general anaesthetic is necessary for the first aspiration, or even that the aspiration of a haemothorax is "comparatively simple." No clear directions are given for the treatment of an infected haemothorax; instead a series of possibilities are presented which may confuse the inexperienced. The authors state that a blocked intercostal tube should be cleared by the injection of saline, without mentioning the danger of air embolism if the pleural space is at all rigid. They also advocate the use of atropine in the treatment of crush injuries and in pulmonary oedema, but in the former case it is dangerous owing to the production of sticky sputum while in the latter it is surely unphysiological. Finally there is a chapter on anaesthesia, which condemns nitrous oxide, although this gas is extensively used in chest surgery, and misrepresents the properties of trichlorethylene.

The great disadvantage of this book is that it fails to give dogmatic instructions. The medical officer dealing with chest casualties needs to be told as simply as possible what to do, and it is useless to present him with a number of alternatives unless the indications for each are given clearly and concisely. If these defects could be remedied in future editions this little book, which contains much useful information and which is a handy size for the pocket, would be a helpful companion to the casualty officer.

SCIENCE AND HUMANITY

The Values of Science to Humanity. By A. G. Tansley, F.R.S. The Herbert Spencer Lecture, Oxford University, June, 1942. (Pp. 31. 1s. 6d.) London: George Allen and Unwin. 1942.

Prof. A. G. Tansley's Herbert Spencer Lecture delivered on June 2 would have been approved by the sturdy individualist in whose honour the lecture was founded and, in these times, when the maxim *fas est ab hoste doceri* is reiterated with angry vehemence, brings to the discussion of a controversial topic a welcome urbanity. The concluding sentence of the lecture is the lecturer's inference from the evidence he has presented: "If we desire to keep alive and vigorous the ultimate springs of our material welfare, and—not less important—to maintain and extend the place of science in our culture, we must jealously guard its freedom and its independence."

Those who have emphasized the importance of scientific planning and organized research have, of course, many excuses for anger. It is only too obvious that few, if any, Ministers of State in this country know anything of science, pure or