A CASE OF INTRACRANIAL TUMOUR.

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IN THE LANCET of June 16th, 1906, I reported a case of sarcoma growing from the meninges over the middle frontal convolution of the left cerebral hemisphere which had been removed by my surgical colleague, Dr. C. C. Elliott. The subsequent history of the case is of interest.

Summary of former paper.—The patient, a European female, aged 44 years, was admitted to the Somerset Hospital under my care in September, 1905. Her symptoms were: mental apathy and defective memory of three or four months' duration; left frontal headaches (severe) one month; occasional vomiting of cerebral type; and slight weakness of right arm and hand about one week. Upon examination the patient was found to be dull and lethargic, slow in understanding what was said to her and in expressing herself, but not aphasic. There was paresis of the right arm and hand, but she was able to execute all movements except those of writing, and there was very slight paresis of the face and leg on the same side. The movements of the tongue and ocular muscles were unimpaired. The pupils were equal and active and vision was normal, but double optic neuritis was found on ophthalmoscopic examination. The knee-jerks were increased; no ankle clonus; plantar reflexes indefinite in type. Tenderness was elicited by pressure in the left frontal and temporal regions. Temperature 97.5° F.; pulse, 54; bowels constipated. There was no evidence of syphilis or tuberculosis; no ear or nose disease; no history of injury.

The patient rapidly became worse, with increasing headaches and tenderness, especially in the left temporal area and behind the left mastoid process. The mental dulness steadily deepened into stupor, and the evacuations were passed unconsciously. The paresis of the right side increased in the face, arm, and leg, and involved also the right external rectus muscle and the right half of the tongue; but although of wide distribution it remained a hemiparesis and was never a complete hemiplegia. The pupils became unequal—right larger—and sluggish; vision much impaired; increasing double optic neuritis, with much swelling and hæmorrhage—more marked in the left eye. The deep reflexes were much exaggerated, especially on the right side—on which also ankle clonus could be obtained. Babinski's plantar reflex and Kernig's sign were elicited on both sides. Vomiting recurred occasionally. There was no appreciable sensory defect, and never convulsions or tremors, vertigo, or nystagmus.

The case was diagnosed as one of intracranial growth involving the posterior end of the middle frontal convolution of the left cerebral hemisphere. Vigorous treatment with mercury and iodide of potassium, and also bromide, was continued for three weeks, but in spite of this the symptoms progressed rapidly and operation was decided upon without further delay. On Oct. 2nd, 1905, Dr. Elliott trephined over the area indicated and exposed and removed a growth apparently originating in the dura mater. It measured $2 \times 2 \times 1\frac{1}{2}$ inches, and was found to be a spindle- and round-celled sarcoma. It compressed the posterior two-fifths of the left middle frontal convolution, and the corresponding portion of the superior convolution. The patient had a "fit" six hours after the operation; she called out, her eyes were fixed and staring, teeth clenched, and head turned to the right. It lasted barely one minute, and had ceased before the arrival of the medical officer. The after-progress was quite satisfactory, and she left the hospital on Nov. 11th, feeling "perfectly well." All paresis had disappeared, the optic neuritis had subsided, leaving normal vision, and the mental condition was entirely satisfactory. The plantar reflexes were normal; the knee-jerks somewhat brisk but equal on the two sides; no ankle clonus. The pupils were equal and active; the left optic disc was slightly paler than the right. The wound had soundly healed, without bulging, and she wore an aluminium cap over the site of the operation.

For full details I would refer those interested in the subject to my original communication.

Subsequent history.—The patient came to see me at intervals, and remained well until April, 1907, when

examination failed to detect any physical signs of defect. After this date she began to suffer again from left frontal headaches. On Sept. 4th she had a fit; her head and eyes were turned to the right, then the right side of the face became convulsed, then the right hand and arm. She became unconscious and fell. When seen by me eight hours later I could detect no motor or sensory defect; there was no optic neuritis; the knee-jerks were a little increased, but there was no ankle clonus. She was kept under observation in hospital for three weeks, but as no further symptoms occurred she was discharged. On Oct. 17th she had another fit—clonic spasms of head and eyes to the right side, then of hands, then loss of consciousness and general convulsions. After the fit no paresis remained, but the mental condition was distinctly impaired. There was no bulging at the trephine opening. She was readmitted to hospital.

It was at first thought that the fit of Sept. 4th might be due to cortical irritation from adhesions at the site of operation, but after this second fit the probability of recurrence of the growth seemed too great to permit of further delay, and at my request Dr. Elliott again operated on Oct. 24th. A large flap of scalp was reflected enclosing the old cicatrix, and the scalp tissues, pericranium, and remains of dura mater were found to be closely adhering to the surface of the brain, especially at the upper edge of the old trephine opening. This latter was enlarged upwards and backwards to the margin of the longitudinal sinus, and after very careful dissection Dr. Elliott exposed a nodulated growth attached to the dura mater and lying over the posterior portions of the superior and middle convolutions of the left frontal lobe. It was removed together with the adherent and surrounding dura mater. In size it was about equal to the primary growth, and—like it—was a mixed (spindle- and round-celled) sarcoma.

The patient made a good recovery and left the hospital on Nov. 29th. Her mental condition was slightly dull; attention and memory were defective, and she felt "strange in the head." The right pupil was a little larger than the left; the fundi were normal, with the exception that the left disc remained somewhat paler than the right, and vision was unimpaired. There was no motor or sensory defect; the knee-jerks were a little increased on both sides.

From that time until now (August, 1912) the patient has remained well. She has no headaches, and there is no pain or tenderness or bulging in or about the site of the operations. Her memory and general mental condition have much improved since the second operation, and are now quite good. There is no paresis, motor or sensory. Vision is excellent, and with ordinary glasses for presbyopia she can sew, read, and write without difficulty. Fundi normal. The pupils are equally active to light and during accommodation, and are usually equal in size; but the right is apt to become larger under excitement—e.g., when examined by several medical men. Her patellar reflexes are brisk on both sides, but there is no clonus. She is able to perform all her domestic duties.

Nearly seven years have now elapsed since the first operation, and almost five since the recurrent growth was removed. The patient has been shown at clinical meetings of the local branch of the British Medical Association and at the Twelfth South African Medical Congress held in Cape Town in November, 1910. When last examined, on August 6th, 1912, she was still to all appearances, and after careful investigation, perfectly well.

Remarks.—A point of great interest is the "silent" character of the recurrence. The secondary growth must have attained considerable size before the fit of Sept. 4th, 1907, first aroused suspicion of its existence. Owing presumably to the presence of the large trephine opening, the usual pressure symptoms were absent or very inconspicuous, notwithstanding the large size of the tumour. There was little or no bulging of the scalp, no vomiting, no optic neuritis, and the headaches were not severe. Ultimately, the continued growth of the sarcoma probably caused dragging of that portion of the cortex cerebri which had become adherent to the scalp tissues after the first operation, and so induced an irritable condition which culminated in a fit. This latter began with deviation of the head and eyes to the opposite side, as would be expected in an irritative lesion starting from the posterior end of the middle frontal convolution.

Remembering this silent character of the recurrence, one

may still hesitate to pronounce the patient "cured," but the length of time that has elapsed since the second operation encourages the hope that she is, and will remain, free from further recurrence.

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Reviews and Notices of Books.

Handbook of Mental Examination Methods. By SHEPHERD IVORY FRANZ, Ph.D., Scientific Director and Psychologist, Government Hospital for the Insane, Washington; *Professor of Physiology, George Washington University. With 33 figures and diagrams. Nervous and Mental Monograph Series, No. 10. New York: The Journal of Nervous and Mental Disease Publishing Company. 1912. Pp. 165. Price 2 dollars.

It is a commonplace of medical journalism to speak of the strides that are yearly being taken in the sister sciences of neurology and psychiatry. At the same time it may be doubted whether the profession is, as a whole, alive to the fact that increase of knowledge must result in a general raising of the standard of qualification for the prosecution of these branches of the art of medicine. It is still apparently assumed in some quarters that the science of psychiatry cannot be exact, while in others the assumption is made that because each of us has a mind it is easy not only to observe the mental condition of others but to draw proper conclusions from these observations. As long as this attitude is adopted, so long will psychiatry fail to attain that level which its importance demands. In view of the wealth of material at the disposal of the investigator, it is peculiarly unfortunate that in England asylum service does not offer that attraction to the scientifically minded young graduate which it ought to offer, while, on the other hand, asylum posts are taken readily enough by men whose qualifications for the work are not always apparent. If it is the business of the asylum officer to deal with mind, then, as Dr. Franz insists, he must, for the furtherance of his work and for the proper investigation and estimation of his material, know what has been accomplished, what facts have been gathered, and what methods have been employed.

No one will feel that the desirability of training the physician especially for asylum practice is superfluous if he glances through the 160 odd pages of this handbook, devoted solely to methods of examination, from which, moreover, as the author states in his preface, many valuable methods have been omitted. The one aim of the author is to ensure that the mental examination of patients may be conducted in a more systematic and scientific manner, and his handbook is well calculated to achieve this purpose. No one who has to do with the medical care of the insane can fail to be stimulated by a perusal of the book; it will serve to bring home to him the immense possibilities for investigation that lie to his hand, and it will assuredly suggest to him lines of study that might be pursued to his advantage and to that of his patients. The chapters are devoted to a consideration of methods concerned with sensation, movement, speech, attention, apprehension and perception, memory, association, calculation tests, time of mental processes, general intelligence, and to methods of dealing with observational data. The laboratory methods of ten years ago become the clinical methods of to-day, and therefore it need not be felt that some of the procedures here described are too elaborate for the ordinary individual. Only those are given which have been personally employed by the author with success.

By way of criticism we could wish that more attention had been given by Dr. Franz to the investigation of apraxia. Seeing that it is a common symptom in general paralysis, senile and arteriopathic dementia, and dementia

præcox, to mention only a few mental diseases, and that it is, moreover, of localising value, the few lines on page 60 devoted to the matter are in our opinion inadequate, and we hope that this will be remedied in a subsequent edition.

The Treatment of Fractures by Mobilisation and Massage. By JAMES B. MENNELL, M.D., B.C. Cantab. With an introduction by Dr. J. LUCAS-CHAMPIONNIÈRE, Président de la Société Internationale de Chirurgie. London: Macmillan and Co., Limited. Pp. 458. Price 12s. net.

THE method of treatment of fractures by movement and massage, although devised in France many years ago, has been but little practised in this country, and this may have been in part at least due to the fact that no full presentation of the methods invented by Professor Lucas-Championnière has appeared in the English language. It is true that Sir William Bennett has published a useful little book on the subject, but the principles have hardly attracted the attention they deserved.

In the volume before us we have an adequate account of this method of treatment of fractures. It is by no means a translation of the French treatise, for it is based on Dr. Menzell's own experience, but it has had the advantage of the supervision of Professor Lucas-Championnière, who in an introduction has expressed his approval of the work. It is founded on his principles, but it shows here and there new details introduced by the author. Those who have employed this method know that it gives better and more rapid results than can be obtained by the ordinary methods of splinting, and that the pain is certainly less. In this book will be found a full description of the way to employ this treatment. The author is by no means bigoted, and the difficulties as well as the advantages are described. The results of ordinary methods of treatment of fractures are not so good that the surgeon can afford to disregard any mode of treatment promising better results, and this exposition of the treatment by mobilisation and massage is all that could be wished. The method is simple and can be easily learned. The massage advocated by Professor Lucas-Championnière is very different from the practice of the ordinary masseur, and the failures met with by some surgeons may be attributed to a misunderstanding of the application of the method.

Before trying any new treatment it is well to learn it, and to those who wish to try this mode of treating fracture we recommend Dr. Menzell's book.

Handbuch der Vergleichenden Physiologie. Herausgegeben von HANS WINTERSTEIN in Rostock. 22. Lieferung. Band I. *Physiologie der Körpersäfte. Physiologie der Atmung.* Zweite Hälfte. Bogen 1 bis 10. Jena: Gustav Fischer. 1912. Pp. 160. Price 5 marks.

THE comparative physiology of respiration is one of the most interesting chapters in physiology, and it is with peculiar pleasure that we welcome Professor Winterstein's monograph—it is practically a treatise on the physico-chemical phenomena of respiration.

Beginning with the respiratory media, water and air, he explains first the condition of the gases in water—the investigation of the gases in superficial waters of the ocean as well as the water taken from great depths, the effect of ocean and other currents, the circulation of gases between deep and surface water. Next air as a respiratory medium is considered. The special part begins with plants, first those plants provided with stomata and lenticels, then submerged plants. As diffusion of gases takes place slowly in water these submerged aquatic plants have adopted three methods to overcome these difficulties: (1) by making their epidermis more permeable to diffusion of gases; (2) by increasing the surface