THE

CANADIAN PRACTITIONER

FORMERLY "THE CANADIAN JOURNAL OF MEDICAL SCIENCE."

EDITORS:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England. — J. E. GRAHAM, M.D. Tor., L.R.C.P. London.
W. H. B. AIKINS, M.B. Tor., L.R.C.P. London.

Business Management, - - J. E. BRYANT & Co., 64 Bay Street.

TORONTO, MAY 1, 1889.

Original Communications.

ON THE CONDITIONS OF THE BRAIN SUITABLE FOR OPERATIVE INTERFERENCE.

BY WILLIAM OSLER, M.D.,

Professor of Clinical Medicine, University of Pennsylvania.

THE conditions available for surgical interference in the brain come within the province of the physician, with whom rests the responsibility of deciding the location of the lesion, its probable nature, and the suitability of the case for operation.

Tumors in their order of frequency are tubercular, gliomatous, sarcomatous, carcinomatous, and cystic.

Tubercular growths are by far the most common, predominating in the early periods of life. Thus in an analysis recently published by Dr. M. Allen Starr,* of over 300 cases of brain tumors in persons under nineteen years of age, 152 were tubercular. Of twenty instances of tumor of the brain of which I have notes, eight were tubercular. The tubercular tumor is scarcely available for surgical interference, as it is rarely solitary, and there is almost always tubercular disease in other organs. I have seen instances in which the growths could have been readily removed—in one case a large mass in the superior parietal lobule, in another, in the occipital lobe. In the cerebellum they occur frequently, and could easily be reached, as they are commonly in the hemispheres. Several cases of this kind have been attacked by surgeons, but, so far as I know, all have proved fatal. The multiplicity of the tumors, the constant involvement of other parts are, in my opinion, fatal objections to operative interference in these cases.

Gliomatous tumors offer a more hopeful outlook, as they are frequently small, sub-cortical in situation, and grow slowly, persisting for years. On the other hand, some of them are extremely vascular, and hemorrhage is not uncommon into or about them. When large and growing rapidly, with much hyperæmia and great vascular distension, with invasion of the neighboring brain tissue, they could not be removed with safety, but the slow-growing, hard, dense fibro-gliomas offer of all cerebral neoplasms the greatest prospect of success. Such an instance I reported several years ago of a small growth in the top of the ascending frontal convolution, accompanied with well-marked Jacksonian epilepsy. So limited was the growth that it might have been difficult to find, but there would have been no difficulty in its removal.

Sarcomatous and carcinomatous growths, as a rule, rapidly invade the contiguous tissue, and they are usually surounded by hyperæmic and softened brain substance, conditions very unfavorable for operation. I do not remember to have seen post mortem any instance which afforded the slightest possibility of removal.

Cystic tumors are rare, particularly in this

Medical News, 1889, 1.