

attack the strongholds of disease which we have overthrown; and however much some may now claim can be done without following his exact methods, still it is to him and to his school that we have to give thanks for showing that it is in attention to utter absence of dirt and to minute details of exactness in operating that we must look for success.

If Listerism is to be credited with much as regards the treatment of wounds and superficial affections, more especially does it evoke our gratitude when the Surgery of Cavities is being considered, for it is here par excellence that it has accomplished its greatest triumphs—because without it certainly the bravest of surgeons would never have dared to be the first to enter the forbidden land, whatever now, with added experience, some are essaying to do.

Still, if in morals cleanliness comes next to Godliness, in surgery it must at least have an equal place, for no amount of prayer for the good result of an abdominal section will counteract the evil influence of an unclean sponge.

Of course it would be useless as well as presumptuous for me to attempt to give you a detailed account of the surgery of the various cavities of the body, and I can only briefly refer to a few points.

Looking first at the operative surgery of the contents of the cranium, our thoughts naturally revert to MacEwan, of Glasgow, who has more than any other surgeon led the van in this department, and any one who had the privilege of being present at the meeting of the British Medical Association, two years ago in Glasgow and of hearing him speak and relate his cases, could not but feel that he was facile princeps. It may now be taken as demonstrated without a shadow of doubt that we can with impunity open the skull, remove clots, cut into and drain abscesses, and take away growths even when deeply imbedded in the brain substance, and in fact deal much as we would with any other region of the body, always provided of course that we take proper precautions.

Naturally in this region, inclosed as it is in a hard bony case our great difficulty consists in diagnosis—in other words—in locating the diseased condition whose presence we can only usually guess at from symptoms arising themselves often in distant parts of the body.

The surgical treatment of brain diseases is comparatively a thing known and determined—but unfortunately the means at our command for knowing just when and where to operate are less satisfactory. For their improvement we must look to the physiologists and the chemical observers, only hoping that light may come out of darkness, and that some day we may have more accurate knowledge regarding the citadel of life, and be able with confidence to attack or rather to fortify its buttresses when weakened by diseases or injury.

In this connection I may briefly refer to a case of brain surgery coming just recently within my own personal experience. It occurred to a patient 19 years

of age who, when a boy of five, fell down a deep well and fractured his skull—portions of bone were taken away by surgeons at the time and others subsequently separated. At age of twelve he began having epileptic convulsions which had continued ever since in spite of persistent medical treatment. When first seen by me he was in a state of complete coma of several days duration, it having supervened upon a succession of numerous severe convulsions. After a consultation between Dr. T. R. Almon (whose patient he was), Dr. Campbell and myself, it was decided to do an operation to see whether any pressure was being exerted on the brain at the seat of injury which had occurred so many years ago.

The operation was undertaken the same day. As careful antiseptic precautions were adopted as are generally obtainable in a private house. The scalp covering the seat of injury was raised by a semi-circular flap, including the scar. Upon the button of bone first removed by the trephine was formed a bony projection of about half an inch pressing downwards upon the dura mater and brain. Another button was removed about three-quarters of an inch from first, and the bridge of bone between sawn through—upon this bridge was found a continuation of the stalactiform projections. The wound in scalp was united by interrupted sutures, sufficient drainage being provided for, union by first intention took place and to-day, about four weeks after the operation, the boy has been up and about for a week. So far there has been no sign of an epileptic seizure—he is perfectly bright and sensible, and I hope we have made a cure, though of course time alone can determine this. A peculiar feature of the case was the escape at time of operation, and for some days afterwards, of a large quantity of serous fluid—evidently through an opening in dura mater at points where projection of bone pressed upon it. This gradually ceased as wound healed. The result would seem to fully justify the performance of the operation, and to suggest that if it had been done long ago the boy might have escaped many years of suffering.

Coming next to the Cavity of the Thorax, we find that less has been attempted in the way of surgical interference. The removal of fluid from the pleural cavity by paracentesis is now an every day occurrence—with antiseptic precautions it can be done with very little risk—and the tendency now-a-days is to do the operation early rather than, as was formerly the case, simply as a last resort after all sorts of internal medication and external applications had failed to remove the fluid.

In connection with this procedure we have lately another operation established—namely the removal of portions of one or more ribs so as to secure plenty of room for thorough drainage. In the only case in which I have had the opportunity of doing the operation the patient unfortunately succumbed after some weeks to an exacerbation of previously existing tuberculous disease. When the fluid contained in the pleural cavity has become purulent the treatment is