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I think, therefore, that I may congratulate myself on the result in this case. No doubt, had it not been for the extensive extravasation of blood in and about the joint in the last accident, we should have obtained a better union than we did, but the members of the Society will see, by examining the limb, that the patient has a perfectly useful arm.

I attribute the speedy attainment of good motion in the joints largely to the fact that complete and continuous rest was maintained until all inflammation had time to subside. I think it is a great mistake for a surgeon to begin passive motion in an injured joint before ample time has been given for nature to repair the injury done. All forcible movement of an inflamed joint can only defeat the very object that we have in view. When a fracture complicates such an injury, it is quite time enough to begin to move the joint when the bone has become united. In former times, surgeons were often over anxious to commence passive motion, and did so before all active inflammation had subsided. This was the cause of much unnecessary pain, and also retarded complete recovery.

The large amount of blood poured out in the case of both the second fractures was doubtless due to the increased vascularity of the parts, resulting from the repair of the preceding ones.

INFANTILE SPASTIC PARALYSIS.*

BY JOHN FERGUSON, M.A., M.D., TORONTO.

This is a disease that has for its anatomical basis several conditions. In one there is the occlusion of a cerebral vessel—vein or artery—by a thrombosis; in another there is the plugging of an artery by an embolism; in another there is a hæmorrhage; and in yet another form there is an encephalitis. These anatomical and morbid changes occurring in certain portions of the brain of the child, affect the cerebro-spinal nerve mechanism, and a paralysis of the spastic type is the result. These paralyses may be monoplegic, hemiplegic or diplegic in form.

The history of the disease is very interesting. The first observations of an extensive nature were made by Little in 1853. Within more recent years the work of Strümpell, McNutt, Sachs, Osler and Gowers deserves special notice. In the *American Journal of Obstetrics and Diseases of Women and Children*, No. 8, 1891, I published the report of an extremely typical case of the diplegic form. In this case I traced the degeneration from the cerebral cortex down through capsule, the crusta, the pyramids and the lateral tracts of the cord. So far as I have been able to ascertain, my case is the first on record where this degeneration was traced from the brain downwards in those cerebral palsies of children.

While it may be admitted that the view of Strümpell is possible, namely, that the cerebral palsy is due to polio-encephalitis, it must be held that this cause is an extremely infrequent one. The views put forth by Osler, Gowers, Sachs, McNutt and Hirt, that the palsy is due to either an embolism, a thrombosis or a hæmorrhage, must be accepted for the great majority of the cases. Gowers holds that the thrombosis is often formed in a cerebral vein, and extends into the adjoining sinus. In the case of an embolism it must be an artery that is involved, and is not infrequently a complication of some cardiac lesion. Hirt holds that many of these cases are of an infectious

* Read before the Clinical Society of Toronto.