

may easily fall into an error of diagnosis, unless he has some familiarity with this class of cases. This is illustrated in a remarkable degree by a case at present under my care, in which a surgeon attributed the paralysis to a fall, which was known to have occurred, and prognosticated a gradual recovery; whereas in this class of cases there is never any natural tendency either towards improvement or recovery. A physician of equal eminence attributed it to an epileptic seizure, and advised that the young gentleman should be removed from the rest of the family, and separately provided for, as he would be liable to epileptic seizures. In this particular class of cases, however, no liability to a second attack ever exists. It is unnecessary for me to make any remarks upon the great importance of such errors of diagnosis.

In reference to the surgical treatment of these cases in the later stage, when the limbs have become contracted, division of the tendons, to remedy the contractions, is often necessary, even in the most severe and apparently hopeless cases which occur at the period, or soon after birth. These cases are, however, unfavourable, in consequence of the general nature of the affection, involving, as it frequently does, both the upper and lower extremities, as well as the muscles of the trunk, so that the benefit is often very limited. Still, by the aid of tenotomy such children are often enabled to stand and walk, when they never could have done so without the operation, and their locomotive powers can subsequently be improved by shampooing and passive exercises. In such cases it is necessary that the parents should understand the exact objects of tenotomy, and the limit to the benefit to be expected.

In the less severe cases, such as occur in the later periods of infancy, when fewer muscles are involved, and contraction often limited to one or two joints, tenotomy is of the utmost value, not only in remedying any deformity, but in restoring the limbs to usefulness. An extreme degree of lameness is often removed, so that not more than a limp remains. In the upper extremity, when the hand and elbow-joint are contracted, all deformity may be removed, and the hand rendered useful for

ordinary purposes, so that the patient may feed and dress himself, especially when the treatment has not been too long delayed without any attempt being made by shampooing and passive exercises, to prevent muscular wasting.

In all cases of this class, when tenotomy is performed, the after-treatment should be carefully conducted by gradual mechanical extension, so as to guard against imperfect union, as the newly-formed connective tissue, or new tendon as it really is, is apt to become elongated and attenuated from a too rapid separation of the divided extremities of the tendon, and not from any failure in the reparative power, which is always good in these cases of rigid muscles. This, however, is entirely under the control of the surgeon, who can regulate the extension, so as to procure the exact length of new tendon required in each case. If in the course of the third or fourth week the union should be feeble, he can check or reverse the extension, and retard the treatment; or he could increase the rapidity of extension if the union should appear to be strong, and the new tendon too short for the purpose required. About six weeks after the operation shampooing and passive exercises should be commenced.

*Cases of the Second Class*, included in the group of "infantile paralysis," are characterized essentially by a flaccid condition of the muscles paralysed. This is the typical form of infantile paralysis—the essential or spinal paralysis of children described by recent authors—the rigid class, first described, not having been generally grouped with them.

In the clinical history of these cases are two remarkable facts—1st, the suddenness of the paralytic seizure, which in its most severe form is calculated to occasion the greatest anxiety and alarm, without premonitory symptoms or previous illness; and 2nd, the tendency to spontaneous, and sometimes complete recovery. Children apparently in good health, are put to bed, and in the morning it is found that one, or perhaps both legs are paralysed; or it may be one or both arms, or it may be an arm and leg. Occasionally the paralysis is complete, involving both arms and both legs, as well as the muscles of the trunk.