

leg muscles are more affected than those of the calf, and there is a consequent lack of balance. The anterior muscles cannot dorsiflex the foot because overstretched by the counter-action of the calf muscles, and a condition of equinus results. Very generally the peronei muscles at the outer part of the foot are more disabled than those situated at the inner aspect, resulting in the foot being thrown unduly inward, causing varus and supination. If the inner group, whose tendons pass behind the inner malleolus, be more disabled than the peronei then we have the foot everted and a condition of pronation or valgus. Marked disablement of the calf muscles causes calcaneus. Various elemental deformities may thus combine, causing every possible variety of deformity.

Similarly the other joints may be so affected by an unequal distribution of the paralysis as to present every anomaly of position.

Emphasis should be laid upon one result which ensues when disabled muscles are permitted to be overstretched. Following the acute stage of the disease a muscle or a group of muscles, for example, the flexors, will be kept stretched, and as a consequence will be placed in a condition unfavorable for recovery. If, however, the arm be flexed acutely at the elbow, and this position maintained for some months by a fixation dressing, the flexor muscles are much more likely to regain power. Even after the lapse of some years muscles which have shown but very little tendency toward improvement will regain power rapidly when kept relaxed. This fact is capable of extensive application, and consistent attention to its import would restore to comparative efficiency, groups of muscles otherwise wholly incapable of their normal function.

It does not follow that all muscles will regain power when kept relaxed. If the large motor cells in the cord controlling a group of muscles be entirely destroyed by the inflammatory process, nothing can restore power to the muscles unless operative measures be adopted to supply them with motor nerve energy from a new source. If all the muscles governing motion at a joint be thus completely disabled, then we have a genuine flail joint.

Fortunately the upper extremity is much less frequently affected than the lower. Seeing that the functions of the upper extremity call for dexterity and actions that are precise, it is found impracticable by surgical measures to bring about restoration so satisfactorily as may be done in the lower extremity, whose functions are coarser and are fairly well performed if body weight be borne comfortably and locomotion be fairly satisfactory.

When deformities have occurred, or when the degree of paralysis is so great as to leave a flail joint, the means of surgical treatment to be adopted are: