

joint, and it is necessary to overcome this deformity in order that efficient extension may be obtained when the brace is applied.

If in this case there is a history of such deformity having been present for two or more years, an operation may be deemed necessary. The patient is anæsthetized and the limb forcibly extended, tenotomies being performed where necessary; after which a plaster of paris spica is applied and allowed to remain on for some weeks, until a brace can be adjusted.

But a large majority of these cases can be straightened without operation and non-operative treatment should at least have a trial in all cases. When we consider the very grave liability of setting up an acute condition of the disease, which though smouldering at the time is readily fanned to a flame by the slightest traumatism, we can understand why it is that after forcible correction these cases may readily go on to abscess formation. Therefore should one always consider carefully before operating.

The non-operative treatment that I refer to is to put the patient to bed with extension applied. In applying extension for separation of the joint surface, it can be easily understood that the line of traction in order to get the best results, must be "in the direction of the axis of the neck of the femur." To obtain this we apply from 6 to 12 pounds of extension weight in line with the axis of the shaft of the femur, and from two to three pounds lateral traction at right angles to it. The resultant of these two forces thus applied is directly on the line of the axis of the neck of the bone.

Where the deformity of flexion is present as mentioned above, the extension made in the direction of the axis of the shaft is applied in line with the angle of deformity. This angle or deformity we gradually decrease by lowering the limb until the foot rests upon the bed and the limb is perfectly straight.

I have seen a contraction of eighteen months duration thus respond to treatment within four weeks.

Having overcome the deformity present, some urge us very strongly to continue the bed treatment, keeping the patient for months in bed with extension. But there are none of us who have carefully watched patients so confined, that have not noticed their gradual loss of vivacity and vitality, and have seen all degrees of anæmia develop, in a comparatively short time.

We have long since come to the conclusion that these cases must be kept up and out in the open air as much as possible.

Before discussing the hip brace, let me refer to what is frequently