

straight splint is applied from axilla to ankle on the sound side, and to the affected limb longitudinal extension is applied by weight and pulley, at first in the direction of the deformity, gradually changing the direction of the force applied until the limb is parallel with its fellow. In addition, another force is applied transversely by fastening a loose bandage around the upper third of the thigh, to which a cord is attached and a weight hung over the edge of the bed. Thus traction is applied in two directions, first in the long axis of the limb, and secondly in the direction of the long axis of the neck of the femur. This transverse or obliquely transverse force, as you will observe, is directly opposed to the powerful adductors and glutei which drag the head upward and inward against the acetabulum. The joint is thus rendered perfectly immovable, and at the same time the health of the patient is built up in every possible way with pure air, nutritious diet, etc. We have now placed the child in the best possible position to combat the early inroads of the disease.

But here at least two questions will be encountered.

(1) Even in the early stage of the disease, would not the patient be better up and about with a properly adjusted splint?

(2) As a result of this absolute fixation, which may have to be prolonged, will not ankylosis be sure to occur?

Both questions may be answered in the negative.

In reference to question (1), I would say that absolute rest to the joint is a prime necessity. We are dealing with a disease which possesses some of the essentials of malignancy, especially where any irritation co-exists; therefore, I would avoid even the possibility of irritation by maintaining the recumbent position until any acute symptoms have *completely* subsided.

It is true we are told that in many of these cases in the early stage the bacilli are frequently absent; this can only be relatively correct.

In a tuberculous patient the bacilli are present somewhere in the body, and the simplest form of inflammation of the hip-joint, the result of some trifling traumatism, will quickly become the rallying point of the disease germs. Let us treat it, then, from the beginning as though the bacilli were really present in the inflamed centre.

In answer to the second question, Phelps, of New York, has demonstrated by experiments upon dogs that absolute fixation of a healthy joint does not produce ankylosis even at the end of five months. It is the prolonged severity of the inflammatory process, not the mere immobility, that produces ankylosis. But even should bony ankylosis result, what is this compared with the saving of the patient's life?

How long are we justified in the continuance of this treatment of fixation and traction with the patient in the horizontal position?

That depends upon the conduct of the disease and the general health of the patient. Perhaps two weeks, perhaps two months. Either one of two courses will the disease pursue. Either the deformity, inflammation, and pain, and all symptoms of disease will gradually subside (that is, pathologically speaking, the tuberculous nidus will return to a quiescent condition and be rendered comparatively harmless by an encapsulating area of healthy bone more or less consolidated); or, on the other hand, the disease will gradually progress. It is highly essential that we should be able to ascertain which of these courses is being taken by the disease; and it is equally important that such knowledge be arrived at without inflicting undue violence upon the joint by rough manipulation on the part of the examiner.

We recognize the fact that the history of these cases almost invariably begins with some petty traumatism, which nevertheless proved sufficient to light up the disease; and yet, in the face of this fact, do we not sometimes see the examining surgeon, in his efforts to ascertain the progress of the disease, violently extending and rotating the limb, even calling anæsthesia to his aid in order that the protesting voice of nature may not interfere with his energetic manipulations?

The extension, then, should be removed from time to time, and the limb and joint *carefully* examined with the least possible violence.

In the more favorable event we will find the deformity or distortion has appeared, and the limb will be parallel with its fellow; pain on motion and tenderness on pressure will be absent or much reduced, little or no thickening in the joint will be felt, and the ilio-femoral crease will be defined. Some apparent lengthening