

may be present owing to the persistent tilting of the pelvis, the functions of the joint will be fairly restored, but external rotation will still be imperfect owing to the continued spasm of the muscles.

Now with this condition of things present we are justified in immediately discarding the extension weights, carefully adjusting a long traction and fixation splint, and with the aid of a pair of crutches and a high boot on the sound leg getting the patient about the ward and into the open air. While the patient progresses favorably this complete fixation and traction should be maintained if necessary for a prolonged period, which should not be shortened by the dread of ankylosis, but should only be terminated by the cure of the disease. In reference to the form of splint to be used, that belongs rather to the paper read by Dr. McKay, who has discussed the mechanical treatment. I will simply say that the ideal splint aims at absolute fixation of the joint with prevention of pressure upon the femoral head or the acetabulum, and these objects appear to be fairly well attained by the splint recommended by Phelps, of New York, in the *Medical News* of Dec. 16th, 1891. It may be removed at night and the extension weight reapplied.

Now in reference to the more unfavorable event, viz., when in spite of your early treatment in the recumbent position, the disease gradually extends. This unfortunate fact may be ascertained by the increasing pain on motion and tenderness on pressure, possibly apparent shortening with adduction; the ilio-femoral crease may be lost or ill-defined, thickening may be felt in the joint or in the neighborhood of the great trochanter; should the disease be sufficiently advanced, fluctuation may be made out and abscesses may be pointing around the joint or down the thigh under the tensor fasciæ femoris muscle. In this condition of advancing disease, with my present light of personal experience and observation, expectant treatment must now terminate and resort be had to the knife. Remembering the pathological condition present, I believe the dangers of absorption have now become so great as to seriously imperil the patient's life and to necessitate the complete removal of the diseased product.

I am aware of the wonderfully encouraging

statistics recorded by American surgeons of late years in the mechanical treatment of these more advanced cases, but I cannot help viewing the condition of these mechanically "cured" cases as, to say the least of it, precarious. Surely we must admit that the tubercle is still present, though encapsuled and quiescent, yet capable of rekindling the inflammatory process when irritated by traumatism. Shaffer, of Boston (and who is more conservative than he?), admits that he has seen many cases of relapse in six and eight years, and even sixteen years, after apparent cure by mechanical fixation methods.

Should we, however, for any reason be obliged to continue expectant treatment after caseation has taken place, the patient if about should at once be returned to bed, abscesses opened aseptically, the cavities washed out with  $H_2O_2$  and stuffed with iodoformized gauze, and weight extension reapplied. In spite of all this, should suppuration continue and the patient's health begin to give way, there is certainly no longer any excuse for delaying the radical operation; and very probably you will afterwards regret you had not resorted to excision at an earlier period of the disease.

In this brief paper, I have confined myself to hip disease as seen in children or youths, because it is in these cases that the element of doubt as to treatment is largely centred.

I have had in view particularly those cases in which the disease develops on or near the epiphyses of the bone, and not those cases of synovial origin so rare in childhood.

I have not taken into account the circumstances in the life of the patient which might preclude even a comparatively brief course of expectant treatment and might render it necessary to give him the benefit of immediate radical interference.

I have not referred to those cases of non-tubercular hip disease periostitic in origin, and following the continued fevers, more especially typhoid; nor have I included cases of congenital syphilis. I have refrained from quoting statistics largely because they are valuable to a certain degree only, and in the present state of our knowledge of the disease are often misleading.

#### INCLUSION.

(1) Hip-disease when seen in the early or