

Surgery.

SACRO-ILIAC DISEASE — DIFFERENTIAL DIAGNOSIS FROM HIP-JOINT DISEASE.

I now present you with a case which was sent to me through the kindness of Dr. Hunt, of New Jersey, and which was supposed to be a case for exsection of the hip-joint. Dr. Hunt first saw the patient (coloured) two weeks ago, but no satisfactory history of the case has been obtained. All the information which I have been able to obtain has been from the patient himself since his arrival at the hospital. He states that he is eighteen years of age; that two years ago he suffered from what might be called a general rheumatic fever. He has been exposed to wet, but under what conditions and to what extent was not ascertained.

As yet no satisfactory diagnosis has been made, and it is for the purpose of arriving at some definite conclusion in reference to this interesting and obscure case, that I have brought it before you.

When I first saw him three days ago, he was sitting up in bed, and occupied the exact position which a patient in the second stage of hip-joint disease usually occupies; that is, with the leg flexed upon the thigh, the thigh upon the trunk, the foot everted, and the limb *abducted*.

We will now apply Nélaton's test for displacement of the head of the femur, which consists in passing a line from the anterior-superior spinous process of the ilium to the tuberosity of the ischium. A line thus drawn will pass, when there is no displacement, exactly over the apex of the trochanter major, which we find to be the course of the line in this case. Now, if we had a fracture of the neck of the femur, the trochanter would be above this line; if absorption of the neck, head or acetabulum, the trochanter would also be above this line; the leg would be *adducted*, inverted and shortened. The position which the patient occupied when I first saw him, was sitting with his left leg flexed, abducted and rotated outward, which is the position of a limb when the hip-joint is over-distended, as with

pus or serum. Further, in hip-joint disease, if the capsule of the joint be not ruptured, you cannot invert the toe, adduct the limb, or extend the thigh, without producing a great deal of pain. But in this case, taking care not to affect parts external to the joint by the motion of the limb, and to hold the pelvis absolutely still, we can invert the toe, and slowly adduct and extend the limb without causing pain. This would go to show that it was not the hip-joint which was involved, or else that the capsule of the joint has been ruptured, and the effusion into the joint squeezed out. Yet this can hardly be the case, for as we look at the limb, we see that it occupies the position common to the *second* stage of hip-joint disease. If the capsule of the joint had been ruptured or perforated so as to liberate the pus, the limb would no longer retain its present position, but would assume the position common to the *third* stage of hip-joint disease. Now, the limb can get in this position from muscular contraction, but if the deformity be due to muscular contraction, we cannot invert the leg and rotate it in, which movements we find can be effected in this case. This fact alone has satisfied me that there is no distention of the joint.

You probably will have observed that in making our examination we have avoided, as far as possible, all sources of irritation and excitement to the patient, for when these patients become irritated, it is almost impossible to do anything with them. As he lies quietly on his couch, we may make some further observations. Our object is to elicit the exact location of the disease. By the application of Nélaton's test line, we have found that the trochanter major is in its normal position. I can crowd the head of the femur firmly into the acetabulum without causing pain. And again, the leg is too long, and its position too good for a carious head of the femur, or carious acetabulum. You will observe that so long as we confine our examination to the hip-joint proper, our manipulations give rise to no pain; but when we crowd the ilii together with only a slight force, great pain is produced. By passing my thumb around the sacro-iliac junction, I elicit severe pain, and upon the inside I find a fulness which is indicative of a sacro-iliac