

if the genito-crural nerve is implicated, because it supplies the cremaster muscle.

This lifting of the testicle indicates, therefore, a higher location of the abscess than when the hip flexion exists without this accompaniment.

In the first three cases the location of the abscess was very likely behind the kidney, although in the second and third it extended higher up and tended to point in the lumbar region. In the first case the pus followed the course of the psoas muscle beneath the peritoneum, and tended to open below Poupart's ligament. It will therefore be observed that in cases two and three the four lumbar nerves were pressed upon, causing not only flexion of the limb, but pain and tenderness over the parts supplied by the first and second lumbar nerves. In case one, from its lower situation, the first lumbar nerve escaped from pressure, but the second, third and fourth were pressed upon, and consequently flexion of limb and retraction of testis took place. And from the direction taken by the pus along the psoas muscle, and not tending to point either in the lumbar region or in the direction of the abdominal parietes in front, pain and tenderness on pressure were absent in the parts supplied by the branches from the first lumbar nerve. In the fourth case the abscess was evidently situated at the upper and back part of the kidney, and simply pressed on the first lumbar nerve. The lower nerves of the plexus were not pressed on, consequently we had absence of flexion and adduction of the limb and retraction of the testicle. The tonic spasm of the psoas, iliacus and pectineus, observed in three cases, was no doubt caused by pressure on the nerves, inasmuch as when the pressure was removed the limb almost immediately came into the straight position.

The presence of albumen in the urine can be accounted for by pressure on the renal veins, thus causing congestion of the kidneys. In a paper such as this it is unnecessary to enter into all the symptoms that would be caused by abscesses in other parts of the cellular tissue surrounding the kidneys, where there might be pressure on the cystic duct, the thoracic duct, ureter, inferior vena cava or sympathetic nerves. To those of you who are familiar with the

functions of these structures the symptoms will be self-evident.

*Diagnosis.*—From psoas abscess, lumbago, neuralgia, morbus coxæ, and perityphlitic abscess.

Psoas abscess is essentially a strumous disease, which can occur only in persons of a strumous predisposition, and is often associated with tubercular disease in other parts of the body, especially of the lymphatic glands, lungs, and mucous follicles of the large bowel. The disease is rarely met with before the age of puberty, and rarely, if ever, in old people. When the abscess is opened, either spontaneously or artificially, the constitution manifests the most lively sympathy, as is evinced by the rapid supervention of rigors and hectic fever, with all its train of evils. In case of perinephric abscess the very reverse occurs when it is opened. In psoas abscess there is pain on pressure along the lumbar spine, especially over the diseased vertebra. Perinephric abscess occurs at all ages, both young and old, as is shown in the cases here reported.

From lumbago it can be distinguished by its having a high temperature from the very commencement, and as the disease advances the position of the limb and the condition of the urine will be sufficient to confirm your diagnosis. The intermitting character of neuralgia will be sufficient to exclude it.

In hip disease, fixity of the thigh upon the pelvis occurs at a very early stage, and any attempt at moving the thigh will move the pelvis. This is not the case in perinephric abscess. The head of the femur can be moved in the acetabulum in all directions without any movement of the pelvis. There is no pain produced by forcing the head of the bone up into the acetabulum, such as is noticeable in hip disease. The apparent or real lengthening that occurs in hip-joint disease is absent. The pain and tenderness usually observed in the groin and lumbar regions in cases of perinephric abscess are absent in cases of morbus coxæ; also the knee pain, although it sometimes occurs at a late stage in perinephric abscess, is not a symptom in the early stage as in hip disease. In perityphlitic abscess its superficial position, and the absence of the other symptoms charac-