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SURGERY.

NEUROMIMESIS.

LECTURE ON THE NERVOUS MIMICRY OF JOINT DISEASES.

> By SIR JAMES PAGET. (CONTINUED.)

Gentlemen,-If it seem strange to you that I should devote two lectures to the subject of the mimicry of diseases of joints—a subject which is usually dismissed with a few lines,-let me say that I estimate its inportance by what I know to be its difficulty. I rarely pass a day without having to be very careful in the diagnosis of cases of this kind; rarely a week without seeing one very doubtful case, in which a diagnosis cannot be made without a complete consideration of all the symptoms discussed in the last lecture and of others to be spoken of in this. For difficulties such as these, two lectures may be tedious, but they are not superfluous.

Let us, then, go on with the symptoms of discases of joints, and see how the mimic may be distinguished from the real. And the next shall be the wastings of limbs near the affected joints. This wasting occurs quickly in nearly all acute inflammations of joints; more slowly in the chronic inflammations. In the chronic it may be from disuse alone; in the acute it is not so; for it is much more rapid and extensive than in any cases of mere disuse. Compare, for instance, cases of fracture of the thigh with those of acute disease of the hip, and you will easily see how much greater is the wasting with scute disease than with disuse alone. Rapid wasting may be seen in the lower limb, especially in the thigh and the nates, in all acute hip-joint diseases; more slow wasting in the painless scrofulous diseases; less in the chronic rheumatic. Wasting in the lower part of the anterior and lateral muscles of the thigh is quickly evident in scute kneejoint disease; only less quickly in the chronic. In similar affections of the shoulder you may see it in the flatness of the deltoid and of the muscular coverings of the scapula; and I think that the same wasting occurs, in greater or less degree, in all muscles near joints that are inflamed; and the more quickly, the more acute the inflammation. It is, I repeat, not a mere wasting from disuse: it is ar more rapid than that; more like what has been called acute atrophy of muscles. such as may be seen in the swiftest cases of infantile paralysis.

This process of wasting is one of singular interest in pathology. I wish I could explain it better than by calling it reflex atrophy. It seems dependent on disordered nervous influence, and often appears proportionate to the coincident state of sensitive nerve-fibres.

it is, unhappily for our present needs, not certainly diagnostic of real joint disease. You may find it nearly as marked, though not so quickly progressive, in some nervous affections as it is in acute inflammatory joint disease. I say you may, not you will; and I cannot tell you in what nerve cases it will be found, in what absent. I believe it is in inafimmations of nerves or in inflammations involving spinal ganglia, but I cannot tell. However, as to diagnosis, you may find inflammation of the hip-joint imitated, so far as pain and wasting are concerned, by some painful affections of the sciatic nerve; inflammation of the shoulder-joint by painful affections of parts of the brachial plexus; and, more frequently, the wasting at the lower part of the thigh, which is common with acute inflammation of the kneejoint, is closely imitated in the cases of certain knee-joints which are painful but not inflamed. In the cases of this kind that I have seen there were no signs of inflammation besides the pain: no heat, no adequate swelling-if, indeed, there were any at all; the patients were nervous or hysterical, and at the end the joint was unchanged in shape and structure.

You may hold, then, that, generally, the wasting of the muscles about a suspected joint adds to the suspicion that it is or has been inflamed; but you must hold this cautiously. You must expect to meet with cases, however rarely, in which similar-westing afternds pain at a joint without inflammation. But, all the more because of these cases, you may hold that if a joint has long been very painful, and yet there is no wasting of the muscles near it, it is not inflamed.

Let me tell you, by the way, that wasting at the knee is commonly produced and is always aggravated by the wearing of elastic knee-caps or tight bandages. I have often been surprised to see how quickly and to what extent these pressures will produce wasting of musclez and waekness, aggravating all the trouble consequent on injuries and disease of joints. They will in this way do such damage that, except for comfort during active exercise, or for the purpose of reducing chronic thickenings and collections of synovial fluid in joints, I believe they ought never to be used.

Wasting, then, can be only cautiously judged as among signs of real joint-disease; it is too common in mimicry to be a safe sign of reality. And so is another sign: impaired utility, or awkward use, such as we have to observe most often in limping or other manner of lameness.

The use to be made of this sign in diagnosis is as of pain. It may be absurdly exaggerated, caricatured; and by mere excess may prove itself unmeaning, as when a patient in good general pain, as if it were due to the disturbance of some health, and with a cool or cold well-shaped foot, nutritive nervous centre, irritated by the painful has maintained for many weeks that it is impossible to bear weight on the foot; or when one, . But, however the wasting may be explained, in whose knee you can neither feel nor see any of a joint, its absence may be nearly enough to

wrong, goes limping as if with an utterly ruined joint. Here, as in so many cases, inconsistency proves unreality.

The difficulty of diagnosis is far greater when there is only slight limping or other impaired use of a joint. Here you had better be very watchful and cautious, and err, if at all, on the side of believing in real disease; for the cases are frequent, especially in children, and in serious diseases of the hip, in which the first, and for a long time the only, sign of real disease is some limping or other erroneous use of a joint.

As you watch the cases in which limping or some manner of lameness is the chief or only apparent sign of disease of a joint, you will find that some depend on, or are ascribed to, mere muscular weakness of the limb, some on a partial slight chorea. The former are often associated with what Sir P. Brodie pointed out as sometimes occurring in hysterical persons—a peculiar laxity or limpness of joints. These are not difficult of diagnosis; if a really diseased joint is loose the disease is very plain. The choreal cases are more likely to deceive. In some there is a sort of string-halt-a quick jerk-up of the heel at every step, faintly suggesting some affection of the knee-joint. Much more puzzling are the cases of slight chorea of the whole lower limb in which, as a patient walks, he limps, and jerks and throws out his leg, somewhat after the manner of one with early disease of the hip. The likeness is, indeed, not very marked; yet in two cases that I have seen it caused great fear: in one, because of the patient; in the other, because the limping followed a blow, and a brother of the patient was crippled with serious scrofulous disease of the hip. In this case, too, the ordinary posture assumed in standing was-by imitation, I believe-like that of diseased hip, with the half-pelvis raised and the foot pointed. The diagnosis of such cases may rest on these facts. If the usual signs of diseased hip-joint are absent or very little marked; if the limping movements are not careful but quick and jerking; if the passive movements of the joint are complete and free; if when the patient stoops, so as to touch the feet with the hands, the figure becomes symmetrical,-there is no real disease. And this will often be certified by choreal movements, such as twitchings of the face or eyelids, told of or still present.

I have thus gone through the chief reputed and usual signs of inflammatory diseases of the joints which may be imitated by nervous affections closely enough to make a diagnosis difficult. But other signs remain which are much more rarely imitated, and never closely, except in some cases of complication of nervous affections with fever or other accidentally concurring diseases. These are swelling and local heat and fever.

Now, as to the swelling of the whole or part