

## SURGERY.

### NEUROMIMESIS.

#### LECTURE ON THE NERVOUS MIMICRY OF JOINT DISEASES.

By SIR JAMES PAGET.

Let me repeat the rule that, in every case, you should study the local before the general symptoms. You will often go wrong if you take the contrary course. In the most evidently hysterical patient there may be a real joint-disease; in the least evidently, there may be a mimicry: and the error of treating a real disease as "only nervous" is one of the worst that can be made; it may be as bad as amputating a limb for a mere mimicry of disease.

Among the diseases of joints, those which are most often imitated are the more or less acute inflammations; not, unless very rarely, the rheumatic or gouty or any of that class, but the so-called common inflammations and the scrofulous. If you would think of the importance of studying them, remember that Sir Benjamin Brodie, to whom more than to anyone else of any time we are indebted for knowledge in these subjects, said that, "among the higher classes of society, at least four-fifths of the female patients who are commonly supposed to labour under diseases of the joints labour under hysteria and nothing else." This statement, of course, does not refer to the class of gouty and rheumatic diseases of the joints; and it needs, I believe, an amendment by the omission of the words "and nothing else," for part of the large proportion is made up by numerous cases of trivial disease or injury made to seem severe by hysteria or other nervous fault. The words "higher classes," also, need strong emphasis; for among my hospital patients, whether in- or out-patients, I think I can be sure that the proportion of nervous joints was less than one-fifth; and even in private practice the proportion of four-fifths is not attained unless in practice almost exclusively among the most cultivated classes.

Among all the joints, the hip and the knee, which are the most frequent seats of real disease, are equally so of the mimicry: a fact not easy to account for. It may be due to mental association, perhaps unconsciously; or to a mingled inheritance—for instance, to an inheritance of nervous constitution and of relative weakness in the joint or joints most weak in progenitors. After the hip and knee follow, in order of frequency, the tarsal joints and carpal, or the elbow and shoulder; but in these, mimicries are too rare for counting.

Another fact, adding to the difficulty of diagnosis, is that the most frequent exciting causes are the same for the real and for the imitated affections of the joints. Injury, or some great fatigue, is commonly referred to as the source of

the mischief. The injury may seem inadequate for such trouble as followed; but you cannot rely on this. Many of the worst instances of scrofulous arthritis follow injuries that seemed very trivial. It may suggest a suspicion of neuromimesis if pain set in with full severity directly after an injury that was not severe; but the suspicion must be lightly held. One of the most acute inflammations of the hip-joint I have seen set in severely, with an almost agonising pain, directly after a wrench of the joint in quickly turning round.

Thus, then, you can get little help for diagnosis from either the seat or the apparent cause of the malady; they are for the most part the same for the real and for the mimic affection. Your reliance must be on the examination of all the features of each case, and on a right estimate of the weight to be attached to each. Let me then take, in turn, each of the signs of inflammatory affections of joints, and see how far they may be imitated, whether separately or together. For although it may be said, generally, that an inflammation of a joint should be marked by many signs, and that in a well-marked case you may study them all, yet, in practice, you cannot treat lightly any case which has even one clear sign of diseased joint; for this may be only the first sign, which others will follow; or the last, which has survived the rest; or it may be one which is so exaggerated as to conceal the others. What is wanted in every case of suspected disease is, that you should be able to say positively Yes or No; and this you cannot do without knowing the weight in evidence of each usual sign.

First, as to pain. Alone, it is not to be at all relied on for a sign of inflammation of a joint; especially if it be severe. If a patient be ready to scream when the accused joint is touched, and yet the joint is not overwarm and the patient not feverish, you may be nearly sure of neuromimesis; and more nearly still if the pain be rather in the parts outside or about the joint than in the joint itself, so that a light touch is said to hurt as much as a hard one, or a pinching of the skin as much as pressure on the joint itself. You must not even rely on what is supposed to be characteristic pains, such as those felt at the knee for disease of the hip, or about the middle of the arm for disease of the shoulder, or even those grinding and burning pains at night which some regard as characteristic of ulceration of cartilages: all these may be mimicked.

I had a boy aged about fifteen in the hospital who had these night pains in a most marked degree in one knee, and the joint was a little swollen; and he, being tuberculous, was wasting, hectic, and very ill. I did not doubt that he had destructive articular disease, and the use of the actual cautery cured his night-pain—another reason, some would have said, for being sure

that his articular cartilages were ulcerating. Soon after this he had similar pains in or near the tibio-fibular joint, and these also were cured with the cautery. But he went on and died with pulmonary tuberculosis, and I examined his knee-joint and found it almost healthy. A very small piece of one edge of the cartilage on the femur appeared eroded, but it was a trivial change, and quite inadequate to account for the severe pain of which the lad had long complained.

The case had been one of nerve-pain at the joint, and the imitation of organic disease had been made closer by the signs of the coincident disease of the lungs. But for this, it might have illustrated what you may take as a general rule—that acute pain in a joint, if it has existed for even a few days without either local or general increase of temperature, is not a sign of acute inflammation of the joint. It may be rheumatic disease or it may be rheumatic gout, or some slight inflammation after injury, in a neuralgic person, but it is not acute inflammation.

There is more difficulty in judging of the meaning of pain in a joint when it is not severe, but dull, aching, "wearing," as patients describe it. You must be cautious in these cases. Pain alone is not enough to prove organic disease; yet the lower degrees of pain seldom exist constantly and long without some organic mischief. I have indeed known several such cases, especially of pain at the hip, the conclusion of which made me believe that the pain was only nervous; for the patients got at last suddenly or very quickly, well, without stiffness or other apparent change at the joint, or with a shifting of pain to some other part. But in all such cases you must be cautious and watch for other signs of disease adding themselves to the pain, such as local heat, swelling at the joint, wasting of parts about it, and others that are least dependent on the sensitive nervous system.

The pain I have been speaking of is that which may be felt in the joint even while it is at rest. Different from this is the pain which prevents the free movement of the joint. It is observed alike in the real and the mimic disease; and you may often judge the pain to be mimicry by its inconsistent severity. If with scarcely any other sign of disease a joint will not permit the slightest movement because of pain, you may greatly suspect the reality of disease; but be very careful not to overlook the signs of increased pain on movement in cases of slight real disease, especially in the diseases of the hip in children. You may often find this the only sign making it clear that a child has real hip-disease. A suspected joint may allow free and smooth and painless movement till, for instance, in extreme abduction of the thighs one adductor becomes much tenser than the other, or in extension the loin is quickly raised, or by some other movement, it becomes evident that the joint will not allow extreme