I. The *relation* between *rheumatoid arthritis* and *nervous disease.*

The peculiar joint affection met with in cases of tabes dorsalis first fully described by Charcot, presents many features both clinical and anatomical similar to those of rheumatoid arthritis. It was, I believe Remak who first, in 1863, drew attention to this striking resemblance, and who suggested the possible spinal origin of rheumatoid arthritis. Much has been written lately on the similarity. In the great majority of standard medical works of the present day, the favourite theory for the explanation of the disease is that it is brought about by changes in the spinal cord. But when the whole subject is carefully considered it is difficult to understand why such a view has become so popular. It certainly has no sufficient ground work to entitle it to be generally accepted as a full and true explanation of the nature of rheumatoid arthritis. The reasons usually advanced for adopting the nervous origin of rheumatoid arthritis, are these :

1. The fact, that in certain diseases of the spinal cord, as tabes, syringomyelia, progressive muscular atrophy, joint changes of a somewhat similar character are met with.

2. The very frequent early and pronounced muscular atrophy observed in cases of rheumatoid arthritis.

3. The history frequently obtained of causes, having a marked effect in lowering the resisting power of the central nervous system to disease.

4. The frequent onset of rheumatoid arthritis with symptoms of a nervous character, symptoms pointing to a central or peripheral nerve disturbance, and there can be no question that in a certain proportion of cases about the first symptoms complained of are tingling and numbness in the extremities. In 10 of my 40 cases such an onset was described, and simultaneously with this perverted sensory disturbance or soon subsequent to it, stiffness of the joints supervened.

The *neuropathic arthropathies.* In a number of well recognised lesions of the central nervous system marked joint changes are occasionally met with. They are probably more frequently seen in syringomyelia than in tabes dorsalis. They are rare in progressive muscular atrophy, hemiplegia and ataxic paraplegia.

The joint changes in tabes may take the form of atrophy or hypertrophy of the structures entering into its formation, or there may be atrophy of some parts and hypertrophy of others. Usually the onset is very sudden and painless, and a characteristic feature is sudden distension of one of the larger joints, the knee generally, from fluid effused in the synovial sac. This effusion may disappear after a time without permanently damaging the functions of the joint.