

More frequently signs of disorganization become apparent. The cartilage is destroyed. The heads of the bones waste and sometimes bony overgrowths spring from the ends and they are also met with in the peri-articular structures.

Occasionally the limb becomes enormously enlarged from the excessive growth of bone, and as soon as the changes in the bones set in there is no tendency to repair. Clinically there is little or no difference between the joint affections of tabes and syringomyelia. Anatomically they also correspond. In a few cases of tabes the joints have been opened early in the disease, and in several cases of syringomyelia, where surgical interference was considered necessary early in the disease, good opportunities were presented of ascertaining the exact changes present in the joint before the destructive process had made much progress. The cartilage is found to be more or less destroyed and covered here and there with polypoid growths. In several cases the ends of the bones were diseased, there being usually a considerable increase in the cortical substance and a wasting of the spongy structure. The capsule is found greatly expanded from the accumulation of the polypoid growths which vary much in size, the smaller ones being soft and vascular and the larger ones hard in consistence and containing but little blood. Bony plates are also to be met with on the internal surface of the capsule. The above intracapsular changes are precisely like those met with in cases of rheumatoid arthritis that have been operated on early in this disease. There has been for some time a difference of opinion as to the structures first involved in rheumatoid arthritis, some contending that it first shows itself in the cartilage, while others think that it arises primarily in the synovial membrane. Early changes, however, are met with in both structures, which are indistinguishable from those seen in syringomyelia and in tabes. In nervous arthropathies effusion into the joints is more common and reaches a greater degree than it does in rheumatoid arthritis. The destructive process reaches a greater degree and runs a much more rapid course in the former than it does in the latter. The clinical difference between the two is much greater than the anatomical. Rheumatoid arthritis is attended by great pain, while the nervous arthropathies usually run a painless course. The limbs in the latter can be bent in all directions without causing any pain, the extreme flexibility of the joints being due to the stretching of the ligaments and other structures by the copious effusion into the joint.

Two different views are at present held as to the nature of the nervous arthropathies, one being that they are brought on by inter-