

While some of these changes occur and several may be associated in the same patient, yet in others the changes may apparently be very slight so that the joint is left with very little damage, and so far as the patient is concerned, seems normal, yet as a rule some thickening can be found in the joint capsule. This is especially true of the knee.

Corresponding to the pathological changes we can to some extent separate three groups of cases: (1) those in which the atrophic changes predominate; (2) those with predominating hypertrophic changes, and (3) those with periarticular changes most marked. The hypertrophic changes usually predominate in the spine. Some writers hold that these represent three distinct diseases, but so frequently do we find at least two of these forms associated in the one patient that it seems more reasonable to regard them as more or less varying results of a common cause. Thus one may see well marked hypertrophic bony changes in the spine and atrophic changes in the peripheral joints. It does not seem wise in the present state of our knowledge to attach too much importance to these various forms as a means of classification.

In the recognition of the amount of change in the structures of the joint or the damage which has been done, the use of the x-rays has been of the greatest possible assistance. With these it is possible to determine how much injury has occurred and accordingly decide regarding both the prognosis and treatment.

Symptoms. In discussing these we must keep in mind that in this disease as in all others there are many grades of severity. Too often this is lost sight of. Because the changes in the joint are comparatively slight it is considered that the case cannot belong to this group. There may be all grades from those of the very slight changes to practically entire destruction of the joint. An exactly analogous condition may be seen in gonorrhœal arthritis in which there may be only slight inflammatory changes or extensive ulceration and destruction. For clinical descriptions it is convenient to divide the cases into certain groups. It must be understood that this is only for description and does not mean that each is a distinct disease.

I. Heberden's Nodes. These require but slight mention, as they are perfectly familiar to everyone. Occurring in the form of bony outgrowth around the last finger point, they may vary from very slight projections to rather marked deformity. As a rule the joint itself is apparently not much affected, yet in some cases there may be flexion or marked deflexion to one side or the other. This condition as a rule is not serious and is usually complained of more on account of the unsightly appearance than for anything else. Occasionally there is considerable pain, especially if the joints are injured in any way.