

The shafts of the long bones are uniformly covered with a thin layer of porous new bone, while the extremities exhibit the changes which are characteristic of arthritis deformans. The specimens are interesting in establishing the antiquity of a disease to be found in every quarter of the globe and accompanied by such definite pathological changes that its recognition is not difficult. Some authorities even in view of recent investigations have refused to consider it a disease *per se* and include under the general term osteo-arthritis, all the conditions which in the lay mind are attributed to rheumatic taint.

As the pathological features of arthritic affections are more carefully examined the dividing line, which in some cases for a time is not clearly defined, will in the majority be sufficiently clear to permit of a diagnosis.

If it be admitted that rheumatic arthritis is an infectious and, irrespective of the treatment pursued, a self limiting disease confined to the synovial membrane and leaving the joint in a condition approximating the normal, there will be no danger of confusing it with a disease which causes such definite and permanent changes as does arthritis deformans. The question is often asked whether arthritis deformans is not a frequent or occasional continuation or result of acute or chronic rheumatic arthritis.

The occurrence of the two diseases in the same anatomical structures conjointly is doubtless possible but improbable. Clinically much may be said in favor of the identity of the two diseases but pathologically, they have little in common, and on more careful investigation it will be found that the two rarely occur either consecutively or concurrently.

The non-occurrence of cardiac complications in arthritis deformans is a potent argument against the identity of the two affections.

The prevalence of the disease among women in some statistics amounting to as much as eighty per cent. and among the laboring classes of congested districts is probably due to diminished vitality of the tissues, from deficient nourishment.

Debility is a factor which must be taken into account and as a senile change is productive of conditions in the joints which have erroneously been considered indicative of rheumatoid change. Further reference will be made to this feature. The conditions which are usually accepted as the pathological indications of rheumatoid arthritis consist in fibrillation of articular cartilage followed by its subsequent removal accompanied by increased thickness of articular bone and its eburnation.

Bone is deposited around the margins of the articular surfaces, later in the ligaments, and even in the synovial membrane. The fibrillation of cartilage followed by its subsequent removal has been thought to be the distinctive feature of the disease. Fibrillation of cartilage however,