

leucocytes. At a later stage may be observed an aggregation of these tubercles; still later a caseous centre is developed in the mass of tubercles; finally liquefaction occurs, and an abscess is formed. Some of my specimens have been made from sections transversely through a small tuberculous abscess, and these exhibit the abscess cavity in the centre surrounded by breaking-down caseous material forming the immediate boundaries of the cavity, outside which one finds tubercles in an active stage of development, and outside this again condensed inflammatory tissue. This inflamed tissue often persists as a thickened gland capsule, the whole of the normal gland structure having been destroyed during the progress of the disease. An abscess may, however, break beyond the limitations of the gland capsule and infiltrate the surrounding tissues, at first a simple peradenitis, then tubercular infiltration and abscess formation may extend to an unlimited extent.

Another point in the development of a tuberculous abscess of importance is regarding the fact that the abscess may be multiple in character. Thus even within the same gland capsule a series of aggregations of tubercles may develop caseous centres, and thus a number of caseous centres may be formed, the centres of which in turn are undergoing liquefaction. These multiple abscesses soon run together in the gland to form a single abscess cavity, but in a specimen presented of a tuberculous kidney it is obvious that here a series of tuberculous abscesses have formed of considerable size, not yet communicating with one another.

Abscess formation is occasionally delayed to a remarkable extent whilst tuberculous disease is advancing. This for example is common in connection with the synovial membrane of a diarthroidal joint. Thus a specimen exhibited shows an enormous thickening of the synovial membrane of the knee joint, removed by arthrectomy, due to tuberculous disease without abscess formation therein.

Lastly, one may call attention to the fact that if a tuberculous abscess be kept sterile, *i.e.*, as regards the entrance of pyogenic organisms, it is capable of resorption. A specimen exhibited illustrates this point. The patient was subjected to the operation of laminectomy for pressure of an abscess upon the spinal cord. One found the abscess in the neural canal and its fluid condition was quite evident at the time of operation; upon opening the abscess in the region indicated one observed that the respiratory movement caused an ebb and flow of the pus into the neural canal. This was accounted for by the fact that the greater bulk of the abscess lay in the posterior mediastinum. Some weeks subse-