

say with regard to the caseous centre or the thickened capsule, but the part immediately within the capsule deserves special attention. Here we have an active process going on, or at all events we have here the portion of the gland in which active disease is apt to be lighted up when stimulated to do so. This area of activity (or it may be in a quiescent state) possesses certain characteristic appearances under the microscope. Thus we may find collections of the so-called typical tubercles. Each tubercle is composed of a central giant cell, with its many nuclei frequently arranged in a horse-shoe shape near portions of the periphery of the cell. Surrounding the giant cell is a zone of epithelioid cells, and surrounding these another zone of round cells (leucocytes), or instead of the "typical tubercle" we may have the condition described by Watson Cheyne, in connection with tubercular bone disease, as "tubercular infiltration," in which we have collections of epithelioid cells, often arranged in groups or columns, with leucocytes surrounding these. Lastly, bacilli may be demonstrated by appropriate methods. The bacillus tuberculosis is usually found in the giant cell, occupying a position in groups towards the centre of the cell, away from the nuclei. The bacilli, however, are to be found also in the epithelioid cells, and it is now held that they are more constantly present in the epithelioid cell than in the giant cell. From this circumstance, Mr. Watson Cheyne was led to assert that he looked upon the epithelioid cell as the characteristic element of the tubercular process.*

Treatment. The principles to be observed in treating tubercular glands by excision are simple. It is none the less important that they should be rigidly observed. The suggestions I make are based upon a careful study of the pathological conditions found and upon my experience in the operative treatment of these cases.

We must endeavor to perform our operation in such manner that we leave an aseptic wound. We are dealing with a septic process, and therefore the use of suitable antiseptics is indicated. Carbolic acid is probably the best form of antiseptic available for our purpose. The operation should be performed with strict observance of the principles of antiseptic surgery as enunciated by Lister. I need not detain you with the details. Our efforts must be directed towards ridding the tissues of the infective material and preventing infection of the open wound during the process.

The incision should be made so as to expose the gland by a clean cut, with as little bruising of the tissues as possible. The line of the incision, when on exposed surfaces, should be determined so as to leave as little noticeable scar as possible. Thus in the neck one may often be able to make the incision along certain natural creases or furrows in the skin and

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