

## REPORT OF THE COMMITTEE ON MEDICINE FOR 1881-82.

(Read before the Canada Medical Assoc., June 8, 1882.)

Two events have occurred during the past year which will cause it to be long remembered by the medical world. The first is the meeting of the International Congress in London last summer, and the second—and in many respects the more important—the recent publication of the discoveries in tuberculosis made by Koch, of Berlin. With regard to the Medical Congress, little will be said more than that in every respect it was a grand success, worthy of the city in which it was held, and of the men who most actively promoted the scheme. The reports of the Medical Department alone are altogether too voluminous to be epitomized, and your Committee can only refer the members of this Association to the volumes already published, being assured that they will well repay perusal.

In this paper, however, the reader will confine himself to the second great event of the year, viz., Koch's discoveries in tuberculosis, preferring to trace the progress of our knowledge with regard to one disease, rather than to go over the whole field of medicine. In our opinion the latter is given so fully in the annual reports of the *MEDICAL JOURNAL* as to render the reiteration unnecessary.

Tuberculosis is a disease which for many reasons is well worthy of our attention. It is by far the most fatal of all, not excluding cholera or plague. From statistics it has been shown that one-seventh of the world's mortality is due to it. Any new light, then, which may be thrown on its causation, or any new points as to treatment, are hailed with satisfaction by the practising physician.

In order to obtain a more correct idea of the present state of our knowledge, it is necessary to make a study of the literature of the disease from the beginning. To do this, one might begin with Laennec, whose treatise is a very remarkable one, considering the slim advantages he possessed compared with the pathologists of the present day. Many of his ideas, which for years had been departed from, have again been accepted, an ample proof of their correctness.

He included under the head of tubercle both the grey miliary bodies and the yellow cheesy matter, the result of inflammatory exudation, thus giving two forms of tubercle, the grey and the yellow.

Virchow, who commenced his investigations of the disease in 1850, limited the true tubercle to the grey miliary bodies, considering the yellow masses to be simply the result of a peculiar transformation of an inflammatory exudation. According to his teaching, in the earliest stages the tubercle is a small body, about the size of a pin's head, composed of lymphoid cells in a very fine stroma. This body unites with others to form nodules the size of millet seeds. These latter shortly undergo a peculiar form of degeneration which he styled caseation. This process is marked first by a drying, and afterwards a fatty change. This is speedily followed by necrosis and softening. Other morbid conditions exhibit the form of degeneration as simple inflammation, carcinoma, &c. In none, however, does it occur so constantly or come on so early as in tuberculosis.

Our present ideas of tubercle do not materially differ from those of Virchow, except that in the centre of tubercles large epithelioid cells have been discovered, which are called giant cells. Our knowledge, then, of the pathological histology of this condition may be summed up as follows:—Tubercles are small nodules, the result of an inflammatory process, which are made up of giant cells surrounded by lymphoid cells contained in a very fine stroma. These bodies present the peculiar characteristic of early caseation. When we combine the two characteristics, first, that of possessing giant cells, and, second, early caseation, we have a form of disease which differs from any other, although either characteristic may be shown to a greater or less extent in other morbid conditions.

We will now pass on from the minute morbid anatomy to the etiology of tuberculosis.

Several years ago Villemin established by experiment the fact that lower animals when infected by tuberculous matter would themselves suffer and die from tuberculosis.

I need not give the experiments in detail, as