

# THE BACILLUS OF LEPROSY, BY DR. GORDON BELL, PROVINCIAL BACTERIOLOGIST.

In view of the recent discovery of leprosy in Manitoba, a short account of the micro-organism which is now generally regarded as the cause of this disease may be of interest. It is a bacillus 6 to 8  $\mu$  long and 1  $\mu$  in breadth, and in its form and micro-chemical reactions so closely resembles the tubercle bacillus that many have regarded leprosy as only a peculiar form of tuberculosis. Both are best stained by the Zuhl-Neelson method, so reacting very much like the spores of other bacteria.

The following are given as the most important points of difference between these two bacilli :—

I. The lepra germ is generally straighter than that of tuberculosis, and stains more readily with the ordinary aniline stains, so that one can obtain fairly good specimens in a few minutes with watery fuchsin.

II. The mode of occurrence on the tissues :—The tubercle bacillus being generally found scattered or in small groups, while in leprosy you get small heaps or clumps of the microbe.

III. In regard to histological features of new tissue. While in that of leprosy you get giant cells, the nuclei are not generally arranged along the edge, as is common in tubercle. A Leproma also has blood vessels, and does not caseate. A tubercle has no blood vessels, and has a great tendency to caseate. In a section of lepra tubercle you find the bacilli in the cells between them, and often in thrombotic-like masses in the lymph vessels.

IV. While the tubercle bacillus is easily grown on different artificial media, it is doubtful if the lepra organism has ever been successfully cultivated.

V. Inoculation experiments on animals have all failed in the case of leprosy, and there is some doubt about the one recorded case, where it is said to have been given to a human being. Tuberculosis is

readily produced in animals by inoculation.

The method adopted to confirm the diagnosis in the first two cases occurring here was that known as Manson's method, which consists in rendering one of the tubercles anaemic with a clamp and then puncturing with a knife needle. From the serum so obtained cover glass preparations were made and stained with carbol-fuchsin and methylene blue. In the third case, which was one of the anaesthetic type, the most careful examination of the blood and pus from one of the ulcers failed to reveal any of the bacilli.

# ECTOPIC PREGNANCY, BY E. S. POPHAM, M.D., READ BEFORE THE WINNIPEG MEDICAL ASSOCIATION

Some authors will not admit that the uterine cavity alone is the seat of development of the ovum, and assert that it has not yet been determined at what point in the female genital tract normal impregnation takes place, and until this is settled, the question whether extra uterine foetation is an abnormal ectopic impregnation, or is simply a detained impregnated ovum, must remain unanswered. But the great majority consider that the normal place in which the ovum is developed is the uterine cavity.

In some cases the etiology seems tolerably certain, whereas in others we must be content for the present with a probable explanation.

Among the chief causes assigned are :

1. The body of the uterus, having been removed, impregnation may occur.
  2. The ovum may escape into the abdominal cavity from the uterus through an opening in the latter, which remained after a Caesarian section.
  3. Absence of ciliated epithelium from the tube. This absence is explained as the result of catarrhal inflammation.
  4. Narrowing of the tube. Various causes.
  5. Impermeability of the oviduct.
  6. Accessory tubes and tubal ostia.
- The greater number of authors put