

paration for only half an hour in the staining fluid, and should no colored bacilli be seen, to conclude from that that none were present in the sputum, one would be very liable to err. We have in our possession now some preparations mounted as recommended by Gibbes, in which are only a very few scattered bacilli to be seen colored. With a HOMOGEOUS immersion lens, others can be recognized uncolored. Sputum of the same patient with the prolonged immersion in the staining fluid shew all that exist deeply colored. We may draw attention here to the great superiority of the homogenous immersion to the water immersion, and the advantage to be obtained by a wide-angled condensor such as Abbé's for illumination. Koch, in his brochure on "Wunds infectionen Krankheiten," draws particular attention to this fact: Unstained bacilli which were recognized only with difficulty by Hartnack's No. 9 immersion can be seen readily even by the uninitiated by a Zeiss' homogenous immersion illuminated with an Abbé condensor.

To refer again to the significance of bacilli in sputum: Balmer and Fraentzel state that during the months of May, June, July and August last they had made several examinations of the sputum in 120 cases of phthisis; they also examined the sputum of other cases in order to obtain positive results. Their examinations, besides enabling them to agree with other observers who state that "where tubercle-bacilli are found in the sputum, we have there tuberculosis of lungs," permits them to draw stronger conclusions: indeed they say that "where no bacilli are found in the sputum after repeated and accurate examinations, there is no tuberculosis of lungs."

In support of these assertions they mention that autopsies were held on all the cases that died during this period, and in none of the cases in which no bacilli were found during life did they find a tubercular condition of the lung. They consider that the results of their observations justify them in asserting amongst other things:—That the prognosis of a case of tuberculosis of lungs can be drawn from the number and degree of development of bacilli in sputum. All cases with abundant, well-developed bacilli give a bad prognosis. These cases improve proportional to the decrease of the bacilli. In all cases of acute tuberculosis bacilli are found in very large numbers. Their degree of development is very various; in many cases they are small, badly developed, and only occasionally

found with spores. In these cases their number is always small. Such bacilli are found in cases in which the disease progresses very slowly or is almost inactive, especially in old closed cavities surrounded by sound tissues.

In all rapidly progressing cases in which there is present fever, nightsweats, etc., the bacilli are much larger, the spore formations are more distinct and much more easily recognized.

The difference between the numbers of bacilli in the sputum of fresh cavities in the lung and in the walls of the cavity itself was very striking. Whilst they were present in large quantities in the sputum, there were very few in the walls. The sputum appears therefore a much better nidus for their development than the living lung tissue.

The access of oxygen to the cavities in the lungs cannot be the cause of their abundant development, as they found them equally abundant in the purulent exudation of the closed knee-joint of a patient with tuberculous affection of this joint.

They found there bacilli not only in sputum and the walls of lung cavities, but also in the tissues; in the discharge from tuberculous ulcers in lungs, in the walls of tuberculous intestinal ulcers, in pus of a tuberculous knee-joint inflammation.

They consider the presence or absence of bacilli is of importance in diagnosing ulcers, joint affections, etc., of a tubercular nature.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting November 17th, 1882.

DR. R. A. KENNEDY, PRESIDENT, IN THE CHAIR.

Dr. Osler exhibited the following Pathological Specimens:

(a). *Cerebral Aneurism and Hæmorrhage*, from a case in the Montreal General Hospital under the care of Dr. Molson. The patient, a woman, æt. 62, was admitted in a semi-unconscious state, with complete paralysis of the right side, following a fit she had had some three days before. As far as could be ascertained her previous health was good and her habits temperate. Death occurred on the 7th day after admission. At the autopsy was found a small saccular aneurism situated upon the left middle cerebral artery, which had ruptured and pro-