

tion of late with 01c.c. doses. Increasing in weight. A cure was expected in this case.

A case of pharyngeal abscess, followed by disease of the atlas, reacted; had been four weeks under treatment without any improvement, but they would continue the injections for months.

A case of cervical spondylitis with hemiplyia had reacted to eight doses during four weeks.

An anæmic woman, whose parents had both died of phthisis, was injected, reaction occurred, and a patch of inflammation appeared on left cheek, having the appearance of a reacting lupus patch. The face had apparently been healthy previous to the injection. A similar case had been observed among Dr. Heron's cases in the Victoria Park Hospital, London, and Dr. Malcolm Morris mentioned to me a similar occurrence in one of his cases.

Two cases of what were classified as bronchitis, gave reaction, but no bacilli were found.

One case of leucocytosis and one of chlorosis, gave reaction and no other signs of tuberculosis.

A case of leucorrhœa having been injected, reaction followed, and after third injection cough was developed and bacilli were found in the sputum.

Frau Scholles on entering had no cough, the small amount of sputum that could be hawked up was devoid of bacilli. After the third injection the sputum increased and bacilli were found.

Rimkus, aged 31, whose mother died of consumption, had deposits in both apices. Bacilli in sputum, is a good example of delayed and prolonged reaction: 002c.c. given on December 22nd, produced reaction in 38 hours; 25th, 004c.c., reaction 36 hours after; 28th, 005c.c., reaction 15 hours after and lasted 18 hours, highest temperature 39.4; December 1st, 005c.c. reaction 23 hours after; December 4th 005, reaction 8 hours after; on 22nd 006, still produced reaction, temperature 39.2°;

on 25th 004c.c., produced reaction, temperature 41.8°; 29th 006c.c., temperature 37.2°.

Among the 50 or 60 cases of phthisis which I looked into one-half were advanced cases, having reaction but reaping but little benefit. Some felt worse and were becoming opposed to a continuation of the treatment. Fully one-half seemed to be benefited and hopes were entertained that after longer treatment good results would be obtained.

In the Moabit suburb hospital, (visited December 31st) which consists of a series of one story buildings looking in the distance like a row of tents, four of the buildings were devoted to cases receiving the Koch treatment. Better results had been obtained here generally than in the Charité probably owing to the unexcelled sanitary conditions, and superior character of the interior arrangements. Prof. Koch gave personal attention to the cases here. Interested myself here chiefly in the cases where the effect of the lymph was aided by surgical operations in the wards of Dr. Sonnenberg and obtained the following information which appeared a day or two later in the *Deutsche Medicinische Wochenschrift*.

Four cases had been operated on by Dr. Sonnenberg during the month preceding my visit, December 31st, and on that day all were free from fever, and except one case were progressing favorably. The operation was done in the space bounded above by the lower edge of the clavicle; in yards by the edge of manubrium; outside by the pectoralis minor; below by the second rib, the pectoralis major drawn down. Chloroform was the anæsthetic used. The incision is made from without inwards about 12 c. m. long and 1½ to 2 c. m. below and parallel with the lower edge of the clavicle. The pectoralis major is cut through and the opening cleared with a blunt instrument to the periosteum and intercostal muscle. All hemorrhage is checked and the parts held apart by retractors. An incision is then made through the periosteum, along lower