

uated or lessened virus thus becomes one of marvelous simplicity.

My conjectures were confirmed by experiment, and now, after the usual experiments, trials and inevitable reverses, I have obtained the microbe of yellow fever in different degrees of attenuation which can be reproduced indefinitely by cultivation.

A guinea pig inoculated by this attenuated virus not only runs no danger of death from the inoculation itself but is placed beyond the dangers and death that invariably follows the injection of virulent blood in animals that have not been protected by the preventive vaccination, or inoculation.

The illustrious savant whose methods I have followed said: "We now possess some virus-vaccine from charbon, capable of protecting against that fatal disease without being fatal in itself, a living vaccine, cultivated at will, transportable everywhere, without alteration, at length prepared by a method that we may believe susceptible of generalization."

I shall now apply his words to yellow fever, and it remained for me to carry my experiments from the animal to man.

The experiment was made last week on myself. Some months ago I was inoculated with an extremely attenuated culture. Fifteen days ago by a second and stronger culture, and, finally, guided by special reasons, I allowed myself to be bitten by mosquitoes that had just bitten a man suffering from specific yellow fever. He was in the fifth day of the disease.

In view of my experiments it became easy to analyse what obtains in the human body, inoculated, as I was, with a virulence of maximum intensity, direct from the body of a patient.

Twenty-four hours after the above direct inoculation I felt sudden pains in the region of the kidneys, a feeling of bruising or soreness in all my extremities, a sensation of tearing in my eyeballs. Two hours after these first sensations my temperature was taken in the mouth and was found to be 39° C. (36.9-10° centigrade being equal to 98½° Fahrenheit). That evening it was 40° C. The next morning also 40° C. That evening 39° C. and on the morning of the 3rd day 39°. Then it kept falling to normal.

Tongue creamy white, gums bleeding, the amount of urine was diminished by one-third. On the fourth day I had got back to my normal condition.

Thus, the preventive inoculation of yellow fever is proven. This was what I had been searching for, a virus capable of transmitting a mild type of the fever without danger.

The first step, the most difficult and the most laborious, because it was filled with the uncertainty of unknown factors, was over. The rest will surely follow in time.

A number of courageous friends having full confidence in the method, and who fully understood the importance of the experiments, and their great utility for mankind, have declared themselves ready to be vaccinated by me. I shall vaccinate them soon, with all the care that such a serious matter requires, and with all the precautions exacted by rigorous experiments.

In conclusion, I may add that the theoretical question of the preventive vaccination of yellow fever is thus solved. The practical question has now entered on a course of experimentation, and promises to be a fact and a safeguard to mankind.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, February 23rd, 1886.

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HÆMOPTYSIS.

The patient now before us came to the out-door room on last Thursday complaining of having, during the previous night, spat up blood, and in proof of her assertion brought with her, in a small vessel, holding about an ounce, almost that quantity of expectoration which consisted principally of blood. Mr. Charles Vidal took her history which is as follows:—

"Catherine Murphy, aged 41, comes to hospital complaining of a hard dry cough, with spitting of blood at intervals. Pain under left breast and choking sensation before attack occurs, knows nothing about her grand-parents. Her father is alive and comparatively well, but last summer was in the hospital laid up with dropsy. Her mother died suddenly of heart disease. Her brothers and sisters are alive and well, with the exception of one sister who died of CONSUMPTION. Up to two years ago she was perfectly healthy, never being troubled with sickness of any kind, and being remarkably healthy as a child. After her marriage her health continued perfectly good; has had several children,