

J. E. Graham, has furnished me with the notes of a case under his care in the General Hospital in January, 1887. She had fever in September preceding; both legs became powerless during convalescence; she also complained of loss of memory; there were fairly well-marked evidences of peripheral neuritis, involving both lower extremities. The ultimate result is not known, as she has been lost sight of.

VIII. *Meningitis*, like pneumonia, may probably be caused directly by the typhoid germ. The symptoms so mask those of the fever that a diagnosis is often impossible. I am indebted to Dr. Graham for the notes of a case of which the following synopsis gives the salient points. A young bank clerk complained of indisposition, with great drowsiness, often falling asleep over his books; no headache; the drowsiness increased till soon he was constantly sleeping, with intervals of delirium. Temperature only slightly elevated and irregular. The coma deepened, with a few conscious intervals, until death. *Autopsy* showed some inflammatory effusion into the pia mater, with deep congestion of all the intra-cranial vessels. In the intestine were found the characteristic lesions of typhoid fever.

There remains the possibility that the intestinal lesions were the result of an indifferent irritant, if Harley is correct in his views that such can occur.*

THE SHURLY-GIBBES TREATMENT OF PULMONARY TUBERCULOSIS, WITH A REPORT OF CASES.†

BY DR. PRICE BROWN, TORONTO.

For more than two years, Dr. Heneage Gibbes, Professor of Pathology, Ann Arbor University, and Dr. E. L. Shurly, Professor of Laryngology, Detroit Medical College, have been experimenting upon guinea-pigs and monkeys, inspired by the hope of discovering a cure for consumption; and at last they believe that their efforts have been crowned with a reasonable measure of success.

In the first place, they demonstrated for their own satisfaction that tuberculosis could be transmitted by inoculation.

Healthy guinea-pigs and monkeys were inoculated from the sputum, or cultures of the sputum, of tuberculous patients under treatment at Harper's Hospital. The animals would sicken almost at once, and in the course of a few weeks or months would die. Microscopical examination invariably found pulmonary or general tuberculosis; and when the animals were allowed to die simply of the induced disease, tubercle bacilli would usually be present.

Prof. Gibbes had performed many similar experiments while in the service of the Local Government Board, of London, Eng., several years previously.

In reference to the length of time required to produce tuberculosis by inoculation, he records many cases of interest. On one occasion he inoculated three healthy monkeys at the same time with the sputum from a patient suffering from acute tuberculosis. Ten days later, one of the monkeys, being very ill, was put to death by chloroform. *Post mortem* examination proved it to be a case of severe general tuberculosis. The other two monkeys developed large abscesses at the seat of inoculation, of which complication the first monkey was entirely free.

Among other points of interest brought out by Prof. Gibbes is the protection against the disease which pregnancy affords; or rather, the temporary prolongation of life which it guarantees to inoculated animals. Two guinea-pigs, one a male, the other a pregnant female, were inoculated with the same human sputum. The male died in twenty days of general tuberculosis. The female had four young ones, one month after inoculation, and died five months and twenty-eight days after inoculation of general tuberculosis.

A similar experiment was made on two females. The non-pregnant animal died of the disease in thirty-five days; while the pregnant one, having had four young ones, died of the disease, but not until four months after inoculation.

A point bearing on heredity of tuberculosis was also of great interest. He took these two litters of guinea-pigs, each born of a tuberculous mother; and keeping them by themselves, bred them in and in (brother and sister) for several generations, one for five, the other for

**Reynolds' System of Medicine*. Article: "Enteric or Typhoid Fever."

†Read before the Toronto Medical Society, February 5th, 1891 (Abridged).