

## DISCUSSION ON TYPHOID FEVER.

### THE SURGICAL TREATMENT OF TYPHOID FEVER.\*

BY

G. E. ARMSTRONG, M.D.

Associate Professor of Clinical Surgery, McGill University ; Surgeon to the Montreal General Hospital, and Attending Surgeon to the Western Hospital ; Consulting Surgeon to the Protestant Hospital for the Insane, Verdun.

I think that the committee that arranged this discussion would have done wisely to have indicated certain features of typhoid for consideration, rather than the whole subject. To do justice at all to the surgical complications and sequelae of typhoid alone would require many meetings, and in the time allotted I can only most briefly refer to some of the most important ones. What I say can only be suggestive, to deal at all fully with any one, this evening, is hopeless.

The bacilli of typhoid can live in the living human body for such a long period of time, and are so widely distributed through the different tissues of the body that evidence of their work is widespread and in many tissues long delayed. Professor Keen has lately published a most valuable work on the surgical complications and sequels of typhoid fever, and from it much that I have to say is taken.

*Gangrene.*—Under this head I do not include bed-sores, although these sometimes are very much of the nature of gangrene. Typhoid gangrene is rare. Neither Murchison nor Flint met with a case in their large hospital experience. It may occur in mild forms of the fever, and generally late in the course of the disease, or early in the stage of convalescence. It may be due to an embolus from the heart, but more frequently to an autochthonous thrombus. In these cases a pure culture of the typhoid bacillus has been found in the walls of the artery and vein, and in the thrombus. The distribution in the cases collected by Keen is as follows : Ears, 6 cases ; nose, 10 cases ; face, neck and trunk, 47 cases ; anus, 5 cases ; genitals, 20 cases ; legs, 126 cases.

The veins are affected by thrombosis more frequently than the arteries, but the results are, as might be expected, less disastrous.

The preventive treatment consists in the attainment of good hygienic surroundings, the sustaining of the heart by cardiac tonics and stimulants, and the careful avoidance of injuries or any undue pressure upon any part. When gangrene has already occurred it is considered wise

(\*Read before the Montreal Medico-Chirurgical Society, Jan. 23rd, 1899.)