

by the discovery of the tetanus bacillus, antitetanic serum, and the researches of Roux and Borrel demonstrating the mode of attack of the bacillus upon the nervous cells.

Fortunately, scientific research and clinical experience in this matter are in harmony. Two points seem to be coming out pretty clearly. One is, that, as the tetanus toxin forms an indissoluble union with the nerve cells, the early exhibition of inhibitory or prevential doses to neutralise these toxins while they are free in the blood stream and before they have united with the nerve cells, is followed by the best results. The anti-tetanic serum is apparently harmless and should be used in the presence of wounds smeared with street dirt, stable dust, etc. By so doing it has been found in one hospital in Paris that this class of injury is much less often than formerly followed by tetanus. This plan is now adopted in the Montreal General Hospital, and although the cases so far treated thus are few in number, in no case up to the present has tetanus developed afterwards.

Another point is that the instillation into the frontal lobes of the brain of a quantity of the antitoxic serum protects the brain and spinal cord and is followed by a larger percentage of recoveries than is the subcutaneous or intravenous introduction of the serum.

THE TREATMENT OF SEPSIS BY ANTISTREPTOCOCCIC SERUM.

Of very great interest are the two cases of septic infection reported on another page by Dr. T. J. S. Halliday, of Peterborough, Ontario. Dr. Halliday may well congratulate himself upon his success. Scientific knowledge, forethought, and tact together can do wonders in these days. The reports of these cases will stimulate others to make use of the anti-streptococcic serum. It was probably helpful in both cases, certainly in the first. In the second it must be noted that the improvement followed almost immediately upon the opening of the superficial abscesses, between the 1st and 5th of January. Doubtless some of our readers will say that the cleaning out of these secondary deposits was the essential factor in the after result. At any rate this case teaches that the use of anti-streptococcic serum does not lessen the necessity of at the same time applying to the treatment of the case ordinary surgical principles.

The serum has been disappointing to many but it is apparently harmless and we think should be given a fair trial in cases of streptococcic infection and also in doubtful cases.