

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GENERAL HOSPITAL, GREAT YARMOUTH.

A CASE OF TETANUS TREATED WITH TETANUS ANTITOXIN;
DEATH.

(Under the care of Dr. H. BLAKE.)

THE discovery in 1885 by Nicolaier of the bacillus of tetanus did much to systematise the treatment of the disease. Amputation had fallen into disuse, as it was found that it rarely succeeded in saving the life of the patient; but now in suitable cases it is an important method of treatment, as it has been conclusively shown that the bacillus is only found in the neighbourhood of the wound, and its presence in the blood or the central nervous system has never been demonstrated. In amputation, however, there is very great risk of inoculating the amputation wound with the bacilli from the original wound or of making the incisions through tissues too close to the site of infection. The value of tetanus antitoxin in certain cases is practically beyond dispute, but in some instances, as in the following, it fails, and we are still in want of exact indications as to the amount of the antitoxic serum which it is desirable to inject. For the notes of the case we are indebted to Dr. F. M. Fellows, house surgeon.

A boy, aged nine years, was admitted to the General Hospital, Great Yarmouth, on Oct. 2nd, 1897. The patient had fallen under a van and the wheel had inflicted an extensive lacerated wound on the inner side of the right knee, opening into the joint. There was great laceration of the soft parts and they were much ingrained with dirt; but, taking into account the age of the patient, it was decided to make an attempt to save the limb. An anæsthetic was accordingly administered and the wound was thoroughly disinfected. Under antiseptic treatment with continuous irrigation of the joint, the patient made good progress up to the 13th, the local condition improving and the temperature being kept within bounds. On the evening of the 13th, however, it was noticed that the patient had difficulty in opening his mouth. The masseters were then found to be in a state of tonic contraction, and there was some stiffness of the muscles of the neck, back, and abdomen. The temperature was 99° F. Amputation above the knee through apparently healthy tissue was performed at 10 P.M. and a supply of tetanus antitoxin was telegraphed for. On the 14th he had passed a good night; the temperature was 100.2°, the pulse was 136, and the respiration was 24. The masseters were slightly less rigid, but there was commencing risus sardonicus. 20 c.c. of tetanus antitoxin were injected under the skin of the abdomen in two doses, one at 3 P.M. and one at 11 P.M. On the 15th there was rather more stiffness of the masseters and of the muscles of the face, neck, and abdomen, as well as slight opisthotonos and commencing stiffness of the muscles of the extremities. The temperature was 99.4°, the pulse was 132, and the respiration was 24. 29 c.c. of antitoxin were administered in three doses at 7 A.M., 4 P.M., and 12 midnight. On the 16th he had passed a bad night. Two tetanic convulsions, affecting the muscles of the face, neck, and upper extremities, occurred during the night. Food by the mouth brought on a tendency to these convulsions, and rectal feeding was accordingly substituted. The temperature was 100.8°, the pulse was 120 and weak, and the respiration was 24 and laboured. 30 c.c. of antitoxin were injected under the skin of the thigh in three doses at 8 A.M., 12 noon, and 8 P.M. Several partial convulsions, as above described, occurred during the day, but never a general tetanic convulsion. All the symptoms became aggravated. The temperature went up steadily to 105°, the pulse could not be counted after 2 P.M., and the patient was evidently dying. Death took

place at 11 P.M., the temperature immediately after death being 108°.

Remarks by Dr. FELLOWS.—Although the incubation period was long—eleven days—the disease ran a rapid course, killing the patient in four days. The amputation appeared to delay the progress of the disease, but the course of the disease was apparently quite unmodified by the antitoxin. I should be glad if any readers of THE LANCET could inform me if the bacillus of tetanus has ever been discovered in the general circulation or anywhere in the body at a distance from the site of inoculation. The antitoxin used was that supplied by the British Institute of Preventive Medicine; it produced no local irritation or febrile reaction.

LIVERPOOL STANLEY HOSPITAL.

A CASE OF HERPES; GANGRENE; DEATH.

(Under the care of Mr. DOUGLAS CRAWFORD.)

FOR the notes of the case we are indebted to Mr. F. Deas, senior house surgeon.

A patient, aged four years, was brought to the out-patient department of the hospital on August 24th last. He was then suffering from well-marked herpes, which was limited very exactly to the area of skin supplied by the twelfth dorsal nerve on the left side.¹ The eruption had then been out for a little over a week and showed three characteristic stages. It had commenced near the middle line of the back and gradually spread round to the front. The lesions appeared first as groups of papules on an inflamed base; these soon became vesicular, and when seen many of the vesicles were purulent and many groups had coalesced. All three stages were well seen. None of the vesicles had yet burst. The inflammation was well marked and had spread slightly into neighbouring skin areas. The child complained of acute burning pain in the affected area. The mother said that before the rash came out the child complained of pain in the bottom of his back. The mother gave a syphilitic history, and the child showed many signs of congenital syphilis. The child was put on quinine mixture, and was also given two grains of pulvis hydrargyri cum cretâ every morning. A local application of weak lead lotion with liquor carbonis detergens was also ordered. Mr. Deas saw the child again a week later, and then all traces of the characteristic eruption had disappeared. Instead, the skin area affected presented many patches of gangrene varying in size from that of a three-penny-piece to that of a crown. The inflammation was intense in the patches of skin intervening between gangrenous portions. The child looked extremely ill, but did not appear to suffer much pain. The diseased skin gave forth a horrible necrotic odour. The mother refused to leave the child in the hospital, but brought him again two days later, when he was admitted. He was then evidently suffering from the effects of septic absorption. The gangrenous patches had nearly all coalesced. Every effort was made to get rid of the dead skin and subcutaneous tissue by removal and hot boracic fomentations, but the child never rallied and died from septic poisoning four days after admission. While in the hospital the temperature varied between 99° and 101° F.; just before death it was 102°. The patient had diarrhoea during the last two days.

Remarks by Mr. DEAS—I suppose the gangrene to be due to vaso-motor paralysis, being a further stage of the cutaneous neuritis. Death from herpes zoster is rare in any case, though more or less extensive sloughing is not very uncommon. Probably the case would not have had a fatal termination had the child been left in the hospital at the commencement of the attack. Unfortunately the body was removed a few hours after death, and I could not get a post-mortem examination.

HERTFORD BRITISH HOSPITAL, PARIS.

RECOVERY UNDER DIGITALIS IN LARGE DOSES IN A CASE
OF APPARENTLY IMMINENT DEATH.

(Under the care of Dr. ALAN HERBERT.)

It is undoubtedly the fact that even small doses of digitalis will materially modify the action of the heart, strengthening the force of the contraction and diminishing the frequency of

¹ Vide Quain's Anatomy, vol. iii., part ii., p. 348.