Clinical and other Notes.

A CASE OF POST-VACCINAL TRANSVERSE MYELITIS.

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The case of transverse myelitis described below is published on account of the interest attached to it owing to its probable connexion with vaccination.

January 23, 1929: The patient, a girl, C. M., aged 8, was admitted to the Military Families Hospital with pains in the abdomen, head and neck.

Previous History.—Headaches and general malaise for four days previous to admission. Twelve days previous to admission had been successfully revaccinated with calf lymph on the left thigh. Nothing else of interest.

On Examination.—Child rather drowsy with slight retraction of head. Neck muscles tender to pressure and movement. Eyes normal, pupils equal and reacting to light. Tongue furred and dirty. Abdomen distended, due to full bladder. (On inquiries, bowels not open for forty-eight hours and no urine passed for twenty-four hours.) Movement of legs painful, but particularly at knee-joints. No swelling of joints. Kernig’s sign present. Other reflexes—nothing abnormal. Temperature 100° F., pulse 98.

Symptomatic treatment.—Catheterization was necessary—twenty-five ounces. In the evening, temperature 100° F., pulse 104. Very drowsy and there seemed more head retraction. Lumbar puncture and about 1½ cubic centimetres cerebrospinal fluid dripped out—not under pressure.

January 24: Laboratory report on cerebrospinal fluid, negative for Gram-negative diplococci.

Laboratory report on urine, 1020. Slightly acid, albumin nil. Sugars nil.

No change in condition of child.

Fifteen cubic centimetres antimeningococcal serum given subcutaneously followed by a reaction in the evening of temperature 101° F., pulse 128.

January 26: Condition continued much the same. Daily catheterization necessary, also no bowel action without enemas. Aperients by mouth having no effect. The antimeningococcal serum given daily for three days. Urotropine by mouth and symptomatic treatment.

January 26: Examination of body shows a condition of flaccid paralysis of all muscles of legs. Loss of all reflexes in legs. There is also loss of sensation to pin-pricks, heat and cold over both legs and lower abdomen up to an area just above the umbilicus. A fairly definite ring could be marked out round the body. No girdle pains. Having no apparatus, it was not possible to test the electrical reaction.
January 28: The area of anaesthesia on abdomen seems to have lessened, the upper edge having descended to below the umbilicus. Bladder and bowel conditions still remain the same.

The patient is fairly comfortable and takes fluids well, but continually complains of pains in the legs, particularly on their being moved.

Temperature is irregular, varying between 97.4°F and 101°F. Pulse between 96 and 118.

Has lost the drowsiness and there is practically no head retraction now.

Urine 1010, slightly alkaline, albumin, staphylococci, streptococci, numerous pus cells and Gram-negative bacilli present. Antiseptic urinary treatment given.

February 4: Area of anaesthesia lessened. Pin-pricks can be felt and distinguished down to about the lower third of thigh. No change in muscular condition. Bowel and bladder conditions remain the same.


February 9: Still high irregular temperature. Urine foul smell—S.G. 1012, alkaline, albumin present, pus cells and the Gram-negative bacilli are markedly increased. Patient given a course of caprokol (hexyl resorcinol) and a B.C.C. vaccine is to be made from a urine culture.

February 13: Irregular pyrexia still present, and condition of urine, bladder and bowels remains the same.

Area of anaesthesia lessened. Pin-pricks can be distinguished about the knee-joints. Still complains of pains and tenderness to slight pressure of muscles of legs.

February 18: Has been a gradual decline in the temperature. Since February 16 there has been incontinence of urine and occasional incontinence of faeces. The muscle pains in legs have been very severe.

February 21: Can now distinguish sharp from blunt (with pin) about the ankle-joint and has made slight movement at the ankle-joint. No signs of normal reflexes.

The B.C.C. vaccine was given in gradually increasing doses at five-day intervals, with gradual but continuous improvement in the condition of urine.

The anaesthetic condition gradually disappeared until March 12 she could distinguish between hot and cold on both feet and legs. Also slight movements at knee- and hip-joints, though they caused a fair amount of pain. About this time she began to ask for the urine bottle and made proper use of it. General condition improving—eating and sleeping well. By April 7 the urine was quite clear and no incontinence. Daily massage was administered but this, if heavy, caused much pain in the legs afterwards. She was soon able to raise legs from the bed, and on April 14 a slight knee-jerk was obtained on right leg. Still some faecal incontinence, April 27. With slight support on both sides could stand up and walk a short distance.
A few days after this, having been medically boarded, she left the station for the United Kingdom.

This child was one of twelve cases (adults and children) that were vaccinated on the same day and from the same batch of lymph. There have been numerous cases of affection of the central nervous system as a sequel to vaccination reported in the United Kingdom, but I have not heard of one before in Egypt.

The report of the investigations of a committee, formed by the Ministry of Health in 1923, stated that there appeared to be no connexion between vaccination and the diseases of the central nervous system under investigation.

It seems, however, from the cases of more recent dates which have been published from time to time that this decision will to some extent have to be revised. In the case I have described no other cause for the symptoms could be discovered with the exception of the recent vaccination. This also seems to be borne out by the rapidity and completeness of the recovery, indicating, as it appears to do, a transitory cause of so short a duration as to leave no permanent effects.

I am indebted to Lieutenant-Colonel L. V. Thurston, D.S.O., R.A.M.C., Officer Commanding, Military Hospital, Moascar, for permission to publish these notes, and also to Major W. M. Cameron, O.B.E., R.A.M.C., Medical Specialist, the British Troops in Egypt, for advice in treatment of the case.

A SIMPLE METHOD FOR ESTIMATION OF QUININE SALTS IN STOCK SOLUTIONS.

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The keynote in the treatment of malaria is to ensure that the patient gets the prescribed amount of quinine salts. Many instances are on record, where the apparent failure of quinine in the treatment of this important tropical disease was found to be due to the mixtures being under strength. The appalling state of affairs as to the quinine content of the mixtures used in civil hospitals of India was revealed by Colonel Megaw and his collaborators, in the two papers published in the Indian Medical Gazette [1] and [2]. The simple method for the estimation of quinine salts published in the first paper was adopted in several of the brigade and district laboratories in India. When the quantities were very much below the standard, the results were obvious, but where the variation was slight, an accurate chemical analysis was essential.

The following method may be useful to officers in charge of military laboratories, as it requires no special extra apparatus or reagents, and it can be carried out with the available facilities, just as easily as a milk-fat