On January 17 the spinal fluid was under normal pressure. It contained no excess of cells; 30 mg. of protein per 100 ml.; no excess of globulin; 730 mg. of chlorides per 100 ml. On January 20 a repeat tap showed that the fluid contained no excess of cells; 30 mg. of protein per 100 ml.; no excess of globulin; 720 mg. of chlorides per 100 ml.; 65 mg. of sugar. No organisms were grown. Queckenstedt's test was negative. The Wassermann reaction of the blood and spinal fluid was negative.

The hemiplegia improved rapidly, all the deep reflexes of the limbs and abdominal reflexes appearing within a week. The patient was discharged on July 31, a happy and lively baby with slight weakness of the affected limbs.

When seen again on August 5 there was no apparent weakness of the limbs. Her mother had noticed some clumsiness of the affected limbs in play, but considered that this was improving. There was no evidence of mental deficiency.

COMMENT

Anderson and Morris (1950) have reviewed the literature and reported a case which developed convulsions 36 hours after a first injection of combined diphtheria-pertussis antigen. Their case had had a previous history of convulsions.

The present case is of interest because no apparent ill-effects had been produced by previous injections of A.P.T. and alum-precipitated pertussis vaccine given singly; the convulsion followed the injection of a mixture of these two antigens, made by the same manufacturer. Sensitization as a result of the previous injections cannot be ruled out, but the frequency of allergic states and the rarity of serious neurological complications of this kind suggest that these reactions may have a genetic basis; a previous history of convulsions may therefore, pending further additions to our knowledge, be regarded as a contraindication to the use of pertussis antigens. It should not be forgotten that an attack of whooping-cough may cause encephalopathy with permanent residua, including mental changes (Levy and Perry, 1948).

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An Emergency Leucotomy

Prefrontal leucotomy is now an established procedure in psychiatry. The indications for such an operation are usually regarded as certain forms of chronic mental illness which have not responded to more conservative methods. In the following case the operation may be correctly described as life-saving; and it would not be inaccurate to speak here of "an emergency leucotomy."

CASE REPORT

The patient, a woman aged 21, was admitted to hospital on August 6, 1947, with a provisional diagnosis of anorexia nervosa. She was the youngest child of a family of eight, whose father had committed suicide at the age of 54. Her childhood and adolescence had passed without revealing any abnormal personality traits. At 19 she became sensitive about her appearance and fastidious about her food, and developed the delusion that she was unable to swallow and that she might become "filled up with wind" and die. She would pretend to chew her food but secretly spit it out and hide it in odd corners. Her sleep was disturbed and she was losing weight. On admission her weight was 5 st. (31.8 kg.); two years previously it had been 7 st. (44.5 kg.). Apart from this peculiarity about eating, there were no other psychotic symptoms.

A course of modified insulin was given and strict hospital routine and observation were maintained. Her weight gradu-

ally returned to normal and she was discharged home on December 13 "happy, sociable, and eating and sleeping well."

After remaining well at home for four months her previous delusions and habits returned, and she was readmitted to hospital on June 30, 1948, in a dangerous state of emaciation. Her urine was loaded with acetone and her appearance was that of a concentration-camp victim. Her weight was 5 st. 5 lb. (34 kg.). She refused all food and required tube-feeding. Later, when her physical health was stronger, a course of E.C.T. was given. This treatment produced only very temporary remission, and within a few days of stopping it the refusal of food began again. Tube-feeding had to be resorted to. This was a painful procedure for all concerned, as the patient did all in her power to resist and to regurgitate the food. She made frequent promises to eat, but was a genius at deception. Food would be found hidden in the strangest places. She showed no insight into the danger she was in and could explain her refusal to eat only by saying "she came of a thin family."

A transorbital leucotomy was performed on December 6, 1948. This produced a temporary remission, but by March 13, 1949, she had returned to her previous state and tube-feeding had again to be resorted to.

It was at this stage that the emergency occurred. She developed a recurrent evening pyrexia. A radiograph of her chest showed "a cavity below the right clavicle with a little surrounding opacity, doubtless tuberculous." Her erythrocyte sedimentation rate at this date was 37 mm. in 1 hour. Further E.C.T. was now out of the question, and the prognosis was indeed grave. Her emaciated state and continued dependence on tube-feeding pointed to a fulminating phthisis soon ending the story.

A full leucotomy seemed now the only possible hope. This was performed on May 4. Convalescence was uneventful and she ate her food satisfactorily from that day forward. Before operation her weight was 5 st. 6 lb. (34.5 kg.) and a week after it was 5 st. 12 lb. (37.2 kg.). On June 27 it was 8 st. (50.8 kg.) and her erythrocyte sedimentation rate was 7 mm. in 1 hour.

In spite of the presence of a tuberculous cavity it was decided not to confine her to bed. The after-treatment of a leucotomized patient should be one of continued occupation, and this was considered a matter of priority in her case. Her activity was gradually increased and no rise of temperature was noticed. As the weeks passed her mental state improved concurrently with her physical condition. She became more interested in other people and in her own appearance, and her work at the occupational therapy class improved. On June 9 a further x-ray report read: "Cavity cleared below right clavicle and infection almost gone."

COMMENT

This case seems worthy of record for several reasons. (1) It raises an interesting point in psychiatric diagnosis. The initial symptoms were classically those of an anorexia nervosa, but the long duration of the illness, the temporary response to E.C.T., and the more permanent response to leucotomy suggest that basically the illness was schizophrenic. (2) It shows that when a transorbital leucotomy has proved a failure a full prefrontal operation may yet be a success. (3) The influence of the mental state on a patient suffering from phthisis is well known. In the above case a specifically psychiatric procedure and the ignoring of the physical disease during convalescence led to an eventual healing of a proved tubercular lesion—a healing as rapid as any collapse treatment would have produced.

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