and the total blood loss was only slightly in excess of normal. Six hours after delivery 5 ml. of 25% magnesium sulphate was given intramuscularly.

The patient was kept in the labour ward until the following day, but by this time she was so improved as to appear quite normal, and she had no symptoms whatever. The blood pressure was 140/100 mm. Hg, and a catheter specimen of urine which was sent to the laboratory was found to have only a trace of albumin. The blood pressure continued to fall, and on April 11 when she left hospital it was 130/80 mm. Hg and there was no albuminuria. Procaine penicillin, 300,000 units, had been given twice a day for three days as a precautionary measure. Post-natal examinations one week and six weeks after discharge from hospital failed to reveal any rise in blood pressure or any albuminuria, and the patient was symptom-free.

Discussion

The most popular hypothesis put forward to explain the causation of eclampsia supposes that pregnancy produces an increased production of toxic metabolites which exert a vasopressor action on the arterial system. There results a rise in blood pressure, and ultimately a condition recognized clinically as a hypertensive encephalopathy. The technique used for the giving of the spinal could not in our opinion in itself have produced the great fall in blood pressure we observed. The posture of the patient and the amount of heavy nupercaine used does not seem to have been sufficient to cause a high or even a mid-spinal block. It may be that in this case the small fall in blood pressure normally produced by injecting a spinal anaesthetic was sufficient to break the vicious circle of rising blood pressure, and that once the fall had begun it was continued. Whatever the explanation the patient showed marked improvement, and it is left for the more experienced and erudite to explain the phenomena.

Having treated a number of eclamptics by the various accepted methods we feel that the treatment described produced by far the most satisfactory result.

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Coal-gas Poisoning in Patient Suffering from Pernicious Anaemia

The following case report seems to be interesting enough to merit publication.

Case Report

A woman aged 42 was admitted to hospital on September 21, 1949. She had been married for 17 years, and had one boy; her mother died in a mental hospital (dementia praecox). The patient was a reserved, meticulous woman, who was never seriously ill, but who became increasingly depressed about nine months previously. She refused to see a doctor, and had made a suicidal attempt with coal gas on July 12, 1949. After four days in a general hospital she recovered consciousness and was discharged after three and a half weeks, no longer depressed, but without any initiative, unable to dress herself, very forgetful, disorientated in time, and sleeping badly. Later, a psychiatrist diagnosed "dementia following carbon monoxide poisoning," and recommended admission to hospital.

On admission she complained of "pins and needles" in her legs and trunk, and giddiness. The ankles were oedematous; the pulse was about 120, the blood pressure 130/76, and there was a soft systolic murmur. Parkinsonism with dribbling of saliva and slight lateral reflex differences without definite pyramidal signs were present; slight

impairment of vibration sense was also found. The patient was co-operative, not depressed, but very retarded and disorientated; her memory was bad. Bacteriological and biochemical laboratory tests were negative. A blood count showed: Hb, 52%; R.B.C., 2,400,000; W.B.C., 3,250, with a normal differential count. A diagnosis of pernicious anaemia was not made and liver extract was not given.

A week later her mental condition had improved, paraesthesiae were slighter, but her general health had deteriorated. A blood count showed all the characteristics of severe pernicious anaemia: Hb, 38%; R.B.C., 1,250,000; C.I., 1.5; complete achlorhydria. Two days after the starting of treatment with "plexan" a confusional state developed. A blood count showed: Hb, 24%; R.B.C., 1,100,000; and more early red cells than before. On one occasion her temperature was 101.4° F. (38.55° C.). A blood transfusion and a four-day course of penicillin resulted in striking improvement physically and complete disappearance of the confusion. Two weeks later further improvement was interrupted by an acute urinary infection (*Bact. coli*) with very high temperatures and another confusional state. The infection was controlled by alkalis and "sulphatriad," with immediate clearing up of the confusion. Since then progress was steady and uneventful, and the patient was discharged, practically free from signs, on April 27, 1950. She is at home under the care of her doctor and does her work satisfactorily.

The fuller history, obtained some time after the discovery of the pernicious anaemia, revealed that the original depression was of anaemic origin: early in 1947 the patient felt tired and depressed, and she became well after liver-and-iron treatment. Later the treatment was abandoned, after which occasional vomiting, diarrhoea, and headaches occurred, but oedema, paraesthesiae, paranoid ideas, hallucinations, and intellectual failure were not present before the suicidal attempt.

Comment

The following points are of interest. (1) The unusual occurrence of carbon monoxide poisoning in a case of pernicious anaemia. We have come across only one possibly similar case (Shillito *et al.*, 1936) in the literature. Aplastic anaemias consequent upon carbon monoxide intoxication, on the other hand, are well known (Whitby and Briton, 1946; Leitner, 1949). (2) Although the mental symptoms due to pernicious anaemia and carbon monoxide can be very similar, in this case the anaemia caused fatigue and a depressive psychosis, and the carbon monoxide intoxication dementia and Parkinsonism (and most likely neuritis and myocardial damage). (3) Although the pernicious anaemia was increasing in severity for at least two months after the suicidal attempt, the depression did not recur and the cerebral damage which had replaced it began to clear up. Also, despite the cerebral and myocardial damage, the two confusional states—one due to the pernicious anaemia being at its lowest level, the other due to the coli infection—disappeared completely when the conditions causing them were controlled. (4) Paranoid symptoms are very common in pernicious anaemia psychoses. They were not present in this case of anaemic depression despite the patient's schizophrenic heredity.

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