The Treatment of Pernicious Vomiting of Pregnancy.¹

By CARLTON OLDFIELD, M.D. (Lond.), F.R.C.S. (Eng.),
M.R.C.P. (Lond.), Leeds.

THE subject I have chosen for my valedictory address is the treatment of the pernicious vomiting of pregnancy, and I trust that members of this society will be interested in hearing the results of my experience in the treatment of this disease, particularly as the methods I use differ from those generally adopted. For more than twenty years I have been of the opinion that all cases of pernicious vomiting of pregnancy are neurotic in origin, and I have treated the condition accordingly. Quite early in my career two primigravidæ, both of whom I had treated before marriage for hysterical symptoms, came under my care for pernicious vomiting of pregnancy. They were ordered ordinary diet, and the vomiting soon subsided. Since then I have met with about 35 cases, but for the purpose of this address I am considering only 29 of them, as the others remained at home for treatment. Of these 29 cases, 5 were in-patients under my care at the Leeds General Infirmary, 17 in the Hospital for Women and Children, Leeds, and the remaining 7 were in nursing homes. All the patients recovered, and in one case only was abortion induced. The advantage of the treatment that I carry out and advocate is that induction of abortion is seldom, or never, necessary, and that the vomiting usually ceases immediately. Indeed, I do not know of any grave illness, such as this is, which responds to treatment so suddenly and so promptly. By contrast the usual methods of treatment, multitudinous in variety and well known to you all, are prolonged and dissatisfying and often end in the induction of abortion, which in this disease is attended by a serious risk to the life of the mother.

Nothing could be more simple than the treatment I adopt. The patient is admitted to a hospital or nursing home and at once put on ordinary diet. The nurses are told, if they have not nursed similar cases of mine before, that the vomiting is due to neurosis, that a bowl must not be provided even if the patient should vomit, and that the words vomit and sickness must not be mentioned in

1. Being a Valedictory Address delivered before the North of England Obstetrical and Gynæcological Society on vacating the Presidential Chair, January 20th, 1922.

the presence of the patient. They must just expect her to take her food like other patients in the ward, and must not try to persuade her to do so. As a rule the patient will at once take the full ordinary diet and retain it, but sometimes only a small portion for the first day or two, part of which may occasionally be vomited. If any vomiting occurs, the patient is assured that it will soon stop, and that she will soon be quite well. In most cases rectal infusion of 4 per cent. glucose is given, and as a rule continuously by the drop method. This relieves the thirst and the feeling of exhaustion, and by diminishing the acidosis I think it lessens the tendency to vomit. No drugs are used, except a purgative when it seems desirable. There is no necessity for psycho-therapy as ordinarily carried out in medical and surgical cases. Hospital and other cases do much better when they are in a ward than in a separate room.

Simple though this treatment is in principle and in practice, difficulties sometimes occur, and some of these I must mention. It may seem strange to you, but the patients are sometimes reluctant to go to a hospital or nursing home. If induction of abortion, which the doctor often suggests, were advised, there would probably be no difficulty in persuading the patient to leave home, but when no operation is necessary it is not always easy to convince her of the advantages of institutional treatment. In the severest cases, however, there is seldom any difficulty when the patient and her friends are assured that she will bear the journey satisfactorily.

In August, 1921, I saw a primigravida, in consultation with her doctor, in a town about 30 miles from Leeds. She was about eight weeks pregnant, and had been vomiting for three weeks. For two weeks she had been under treatment for pernicious vomiting, and for several days had not retained any food. Vomiting and retching had been almost incessant for three or four days. Various medicines have been tried and glucose given by the rectum. The urine had given a strong reaction for acetone when tested a week previously. Her face was drawn; her eyes sunken; she was exhausted and distressed. The pulse-rate was 120 per min. Her doctor had arrived at the conclusion that nothing but induction of abortion would save her. The friends were very reluctant for a while to allow her to be taken to Leeds, but after being told that the vomiting would soon cease when she arrived there, and that she would soon be better, they agreed to take her. She vomited once on arrival, and had a meal of tea, bread and butter and stewed apples as soon as she was settled in bed. She kept the food down, slept all night and took coffee, bacon and egg, toast and marmalade for breakfast next morning. Ordinary diet was continued during the ten days she was in Leeds and the vomiting did not recur. When she went home she looked and felt quite well.

I will now narrate the details of a case which illustrates the advisability of the patient being placed directly under the daily charge and observation of the obstetric surgeon who advises the treatment. With the exception of this all the cases were treated in Leeds, where I can obtain nurses who have entire faith in the treatment. She was a primigravida, aged about 30, who had been ailing and had had albumen in her urine for four or five years. She was eight weeks pregnant. She had vomited severely for two weeks, and had been in a nursing home in a neighbouring town for about a week and fed with small quantities of Benger's and similar food. This was usually returned, and so were water and tea. She looked very ill, and I pressed her husband and her doctor to send her to Leeds. As they refused, a trial of ordinary diet was given, to the obvious amusement of her incredulous nurses, and glucose enemata were ordered. The vomiting persisted, and when I saw her again three days later she was no better. I noticed at once a capacious bowl still remaining at the bedside, which, in my opinion, was a contributory cause to the persistence of the vomiting. I again expressed my conviction that she would soon be well if she came to Leeds, and advised against induction of abortion, but she remained where she was, and was treated by glucose infusion, given continuously, and by semi-starvation diet. Sugar, diacetic acid and albumen were present in the urine. Vomiting continued in varying degrees for some weeks, and eventually she recovered, but the sugar in the urine persisted until after the labour at term, when she was safely delivered of a weakly child weighing 4 lbs. It is my belief that if my advice had been accepted this patient would have recovered much sooner and the life and health of herself and child would have escaped the serious dangers through which they passed.

In three or four cases in which the vomiting has persisted after admission to hospital, I suspected that the patient wished to get rid of her pregnancy. One of them, of a very severe type, acknowledged after spontaneous abortion at the sixth month of pregnancy that she was "determined not to go through with it," and that she had produced the vomiting by putting her finger into her pharynx. In some other instances I have spoken seriously to the patient and have pointed out the danger of the persistent vomiting and of induced abortion, and afterwards, with one exception, the symptoms have soon cleared up. In the exception, however, abortion had to be induced. She was sent to the Women and Children's Hospital by her doctor, who told me and the patient that induction was necessary to save her life. She improved after admission, but relapsed again after her friends had visited her and told her that her family doctor said that she must have abortion induced or she would die. She was better and worse for two weeks,

the bad turns always following visiting days, and in the end I gave up the struggle and evacuated the uterus.

I trust that I have explained clearly and fully the treatment carried out and the difficulties met with, but I should like to emphasize the necessity of having nurses who believe in the treatment. I am asked occasionally if my results are good in toxæmic cases. My reply is that most of my cases are toxæmic, but I regard the toxæmia as a result and not as a cause of the vomiting. Many have been seriously ill and emaciated and have had bile-stained conjunctivæ and bile in their urine. Such cases recover as quickly as the less severe, and their recovery is more dramatic.

Perhaps I ought to say a word or two about the pathology of this condition, although I am mainly concerned with its treatment. Tweedy¹ thinks that pernicious vomiting of pregnancy is due to food poisoning, Hirst² and other writers that abnormal secretion of the corpus luteum causes it. These theories are highly speculative and have little evidence to support them. Most authorities appear to favour the view that some toxic substance is absorbed from the developing ovum. This seems a more reasonable hypothesis, because there is no condition, apart from pregnancy, like pernicious vomiting. One of my cases, however, seems to offer evidence against it, for the vomiting continued, although the ovum was almost completely decomposed. Pathological investigations, which have been carried out extensively, have been mostly concerned with the character of the metabolic disturbance rather than with its primary cause. Some workers³ have concluded that the chief disturbance is one of carbohydrate metabolism, others of nitrogenous metabolism. Whitridge Williams, in 1905 and 1906, expresses the opinion⁴ that the ammonia coefficient is valuable in the diagnosis of the severity and the variety of the disease and also as a guide to treatment, more particularly with respect to the question of induction of abortion. In a later paper⁵ he admits that he overvalued the significance of the ammonia coefficient. He also says: "In my experience neurotic vomiting is the variety most frequently encountered,"⁶ and mentions a case in which the vomiting ceased at once when he decided to induce abortion. He believes, however, that in some cases a primary toxæmia is the cause of the vomiting, but to my mind his arguments in favour of this view are not convincing. Pathological investigations into the changes in the urine have not been made in my cases, chiefly because the work seemed unnecessary for purposes of treatment and prognosis, and also because the vomiting has usually ceased before any investigations could have been carried out.

My clinical experience leaves me in no doubt that all my cases

are of neurotic origin, and I believe that all cases of pernicious vomiting of pregnancy are of this variety and that the more severe cases are later or advanced stages of neurotic vomiting.

Conclusions.

1. Vomiting of pregnancy can be cured quickly as a rule and with a high degree of certainty by the removal of the patient to a hospital or nursing home and by feeding on ordinary diet.
2. Induction of abortion is seldom or never necessary.
3. The so-called toxæmic cases are usually, if not always, a later stage of neurotic vomiting.

REFERENCES.

1. Tweedy, H. *Journ. Obstet and Gynacol. Brit. Emp.*, 1914, xxvi, 216.
2. Hirst. *Amer. Journ. Obstet.*, 1919, lxxix, 327.
3. Harding. *Lancet*, 1921, ii, 327. Titus, Hofmann and Givens. *Journ. Amer. Med. Assoc.*, 1920, lxxiv, 777.
4. Whitridge Williams. *Amer. Journ. Med. Sci.*, 1906, cxxxii, 343—354.
5. Whitridge Williams. *Journ. Obstet. and Gynæcol. Brit. Emp.*, 1912, xxii, 251.
6. *Ibid.*, 250.