

THREE CASES OF PERNICIOUS VOMITING OF PREGNANCY.

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PERNICIOUS vomiting is fortunately a comparatively rare disease of pregnancy, but when it does occur it is one of the worst complications to be met with. The following three cases are of sufficient interest to warrant their publication. They all occurred within the space of a little over two months; two were treated in the Glasgow Maternity Hospital, and the third one in Renfrew, under the care of Dr. Dunsmuir, who has kindly supplied me with notes of the case.

CASE I. Mrs. D., 4-para, æt. 28, was admitted to the Glasgow Maternity Hospital on October 23rd, 1902, suffering from pernicious vomiting. Dr. Fraser, of Kilsyth, who had sent the patient in, had treated her for some weeks with the usual gastric sedatives and rectal feeding, but without avail. The patient stated that in her first two pregnancies she had experienced no inconvenience, but during her third, vomiting had begun after the sixth month and had lasted till the end of the pregnancy. When not pregnant she had never been troubled with indigestion. She had last menstruated in March, so that she was about seven months pregnant. At the beginning of the fourth month nausea with retching had set in. This was most marked in the mornings. There was no pyrosis, and the appetite was good. Towards the end of the fifth month the sickness had become more persistent and the vomiting excessive. She remained in bed under treatment, and the vomiting improved slightly for a short time, but soon became worse. The appetite was fairly good, and she had a craving for potatoes, but everything she took was immediately rejected. There were never any streaks of blood or coffee-ground material in the vomit.

Condition on admission. The patient seemed to be *in extremis*. She was emaciated to a degree; her face was pinched and drawn, and her extremities cold. The temperature was 95°F. and the pulse running at 140, intermittent, and thready in character. Her breath had a sourish smell and she complained of thirst and kept asking for water.

As Dr. Fraser had already tried medicinal means, including rectal feeding, I decided to induce labour at once, although there seemed little hope of saving the woman's life. She was at once given $\frac{1}{30}$ th of a grain of strychnine hypodermically, a pint of normal saline solution under the breast, and 2 ounces of brandy by the rectum. A vaginal examination revealed that the os was quite patent

and a small head was in the pelvis. I ruptured the membranes as the quickest way of inducing labour. Sips of very hot water were given and rectal enemata every few hours. About two hours after rupturing the membranes the patient began to complain of labour pains; the pulse was now 125, and the temperature still 95°F. Three hours after this a dead foetus was expelled almost painlessly; it weighed 2 $\frac{3}{4}$ lbs. and was extremely emaciated but not macerated. There was no post partum hæmorrhage. The temperature was now 97·2°F and the pulse 136, intermittent, and almost imperceptible at the wrist. Strychnine $\frac{1}{30}$ th grain was given hypodermically. Three hours after delivery the patient was very collapsed; the pulse could not be felt at the wrist, and the extremities were cold. Another saline injection (1 pint) and $\frac{1}{30}$ th grain of strychnine were given. This seemed to rally her a little. As the rectal enemata were not being retained a drachm of ice-cold peptonized milk and sips of iced champagne were given by the mouth.

October 24th. The patient has improved a little. She is retaining the peptonised milk and champagne. The temperature is still sub-normal, but the pulse has improved slightly. No urine has been passed, and on passing the catheter the bladder was found to be empty. She was given imperial drink by the mouth and retained it.

October 25th. The patient has continued to improve. Four ounces of urine were obtained by catheter. It was very highly coloured, s.g. 1030 and contained a heavy cloud of albumen. All nourishment by the mouth is being retained. The pulse is improving.

October 27. The patient has continued to improve. The kidneys are acting better but the quantity of urine excreted cannot be ascertained as some has been passed in bed; five ounces were obtained by catheter. It still contained considerable albumen, no tube casts, but large quantities of oxalate of lime crystals.

From that time onwards the convalescence was uninterrupted, and when the patient left the hospital she had gained considerable flesh. For the first four days she was freely stimulated with champagne, and given peptonised milk and imperial drink by the mouth, and in addition nutrient suppositories. She also had $\frac{1}{30}$ th grain of strychnine hypodermically every six hours. For the first 24 hours there was practically no urine excreted and I was afraid that complete suppression would result, but fortunately the kidneys resumed their functions before any uræmic symptoms revealed themselves.

On admission this case seemed quite hopeless, and I did not feel justified in holding out any hopes to the friends, but fortunately the gloomy prognosis was not fulfilled.

CASE II. Mrs. B., 2-para, æt. 23, was admitted to the Glasgow Maternity Hospital on December 13th, 1902, suffering from severe vomiting of two months' duration. Her last pregnancy had terminated 16 months before in a six months' miscarriage, after four months' very severe vomiting. The patient had last menstruated three months ago. Two months ago morning sickness had commenced, and in a very short time become so bad that nothing whatever would lie on her stomach. There had never been any blood in the vomit.

Condition on admission. The patient was very wasted; the pulse was small, weak and rapid; the temperature was 97·6°F. Her mouth was in an extremely septic condition, most of the teeth of both jaws being badly decayed and there was pyorrhœa alveolaris. The stench from her breath could be felt at some distance from the bed. There was slight epigastric tenderness, but nothing abnormal to be detected in the abdomen or chest. Per vaginam the uterus was found enlarged to the size of a three months' pregnancy. It was normal in position and the cervix was not eroded.

Treatment. The patient's mouth was cleansed every two hours with antiseptic mouth washes, but it was quite impossible to get it into anything like a sweet condition. Nutrient enemata were given and a pint of normal saline solution subcutaneously daily.

December 18th. The patient has greatly improved under rectal feeding and saline infusions. This morning she was given ⅓ of Valentine's beef juice thrice at an hour's interval, but she vomited. Peptonised milk and Benger's food in small quantities were given from time to time, but as a rule vomiting followed.

December 31st. There has been no vomiting for four days, and feeding by the mouth has been begun to-day again. She seemed to improve a little and was able to take a little tea and toast besides the peptonised foods, but on January 6th severe vomiting came on again. The rectal feeding was causing her great inconvenience. The patient's condition was certainly better than when she was admitted, but it seemed hopeless to attempt to carry her on, so I determined to bring on an abortion.

January 6th. After thoroughly douching the vagina, a sterilized sound was passed and the cervix and vagina plugged with iodoform gauze.

January 8th. The os has dilated considerably but the uterine contents have not been expelled. Under chloroform the entire uterine contents were removed with the fingers and flushing curette.

January 18th. The patient has progressed most satisfactorily since the induction of abortion. There has been no sickness and she takes her nourishment very well. As her mouth is still in a very

filthy condition, and it is quite impossible to cleanse it, the rotten stumps were drawn to-day under chloroform. For three days she was very well and her mouth was getting quite clean; she then began to complain of a slight cough. There was no dulness but a few râles could be detected at the bases.

January 23rd. This morning her temperature rose to 103·8°F.—the first time since admission that it had risen above 99·4°F. The respirations were 40 and the pulse 120. There was now dulness at the left base and tubular breathing at both bases. She was removed to the Royal Infirmary where she died from pneumonia a few days later.

The ultimate result in this case was unfortunate, but so far as the sickness was concerned her condition was quite relieved. The pneumonia was probably an inhalation one, and considering the septic condition of her mouth it was not to be wondered at. Perhaps we erred in removing the stumps so soon, but as the patient was anxious to go home she wished to have them out before leaving. During the whole time she was in hospital the mouth had been swabbed out carefully every two hours during the day, but it was impossible to render it even fairly clean. When the abortion was induced I was very much afraid that the uterus would become septic, but the discharges remained perfectly sweet.

CASE III. Mrs. G., 1-para, æt. 38, was seen by me in consultation with Dr. Robert Dunsmuir, in Renfrew, to whom I am indebted for the notes of the case. The patient had been married on September 28th, and had last menstruated on September 17th. Dr. Dunsmuir first saw the patient on November 30th, and was informed that the sickness had commenced on the morning of the 24th of October. At first it only occurred in the morning, and she was fairly well throughout the day and fit for her usual household duties. Two days previous to Dr. Dunsmuir's visit the vomiting had become so incessant that the patient had been forced to keep her bed.

On inspection the breasts showed a slight darkening of the areola with traces of Montgomery's tubercles. The patient's diet was carefully regulated and an alkaline stomachic mixture administered. There was an amelioration of her symptoms until the 9th of December, when there was a recrudescence of the nausea and vomiting to such an extent that the stomach rejected everything. Her sleep was very broken and disturbed by frightful dreams. Rectal alimentation was now resorted to and nothing given by the mouth except a little iced water to relieve the intense thirst. A morphia suppository was administered each night to ensure sleep. The patient's condition did not improve. Whenever she raised her head off the pillow she retched

violently. There was considerable bile in the vomit. The temperature now began to rise slightly above normal, and the pulse to quicken. Her face became drawn and pinched, and her aspect one of absolute exhaustion.

I saw the patient with Dr. Dunsmuir on December 26th. She had a very drawn, pinched expression, her pulse was very weak, and her voice feeble. She was extremely exhausted. Whenever she raised her head retching came on. She was in an extremely nervous condition. A vaginal examination revealed that the uterus was enlarged and the cervix softened. The uterus was not anteflexed, but its posterior wall seemed to bulge somewhat against the rectum.

We determined to again try rectal alimentation combined with oxalate of cerium and bismuth by the mouth, but there was no improvement; so on December 30th I induced abortion by passing a sterilized sound and rupturing the sac. I packed the cervix and vagina with gauze. On the following day I dilated the cervix slightly and cleared the uterus out with a flushing curette. There was no more vomiting, and the patient made a slow but good recovery, and Dr. Dunsmuir reports that three months later she was as strong as ever she was.

In this case and probably in the previous one the onset of the sickness apparently corresponded with the time of suppression of the first menstrual period.

Many theories as to the causation of pernicious vomiting of pregnancy have been propounded, but we must confess that the etiology of the condition is still very obscure. The displacement theory of Graily Hewitt has never commended itself to me. I have never yet seen a case of vomiting which could be ascribed to displacement of the uterus, and of the many cases of displacement of the pregnant uterus which I have had to deal with none of them were troubled with excessive vomiting. The neurosis theory is one strongly held by some observers, and there is no doubt there is a considerable neurotic element in many of the cases. Granted that it is a neurosis, we still have to determine the cause of the neurosis. The more cases I see the more firmly am I convinced that the cause is a toxic one, and the poison, whatever it is, acts through the nervous system. The cause certainly lies in the uterine contents, as the excessive sickness ceases as soon as the uterus has been cleared out. This was true in the three cases just described. When we once thoroughly understand the tissue metabolism which occurs during gestation the etiology of pernicious vomiting and of eclampsia will in all probability be made clear to us.

In the treatment of the condition, medicinal means should have a fair trial. Rectal feeding is certainly of very great use. When everything is rejected all feeding by the mouth should be stopped for ten days or a fortnight. To relieve the thirst saline injections, either high up into the bowel or subcutaneously, should be given. In Case II. this was done for several days, with benefit to the patient. If the condition is a toxæmic one, saline injections should be useful. After the stomach has had a thorough rest for a fortnight small quantities of peptonised food should be tried by the mouth. If this is rejected one must then seriously consider the advisability of terminating the pregnancy. To delay until the patient is thoroughly exhausted is merely to court disaster. When a patient has reached the condition in which Case I. was it is almost hopeless to expect to save the woman. Most of the cases which come into hospital are so far through that many of them die from exhaustion shortly after delivery. I am quite sure that if I had delayed much longer with Case III. the result would have been fatal. In her case febrile symptoms were beginning to manifest themselves, and this is an exceedingly bad indication.