

## FATAL CASES OF PARTIAL SUPPRESSION OF URINE FOLLOWING LABOUR AND MISCARRIAGE.

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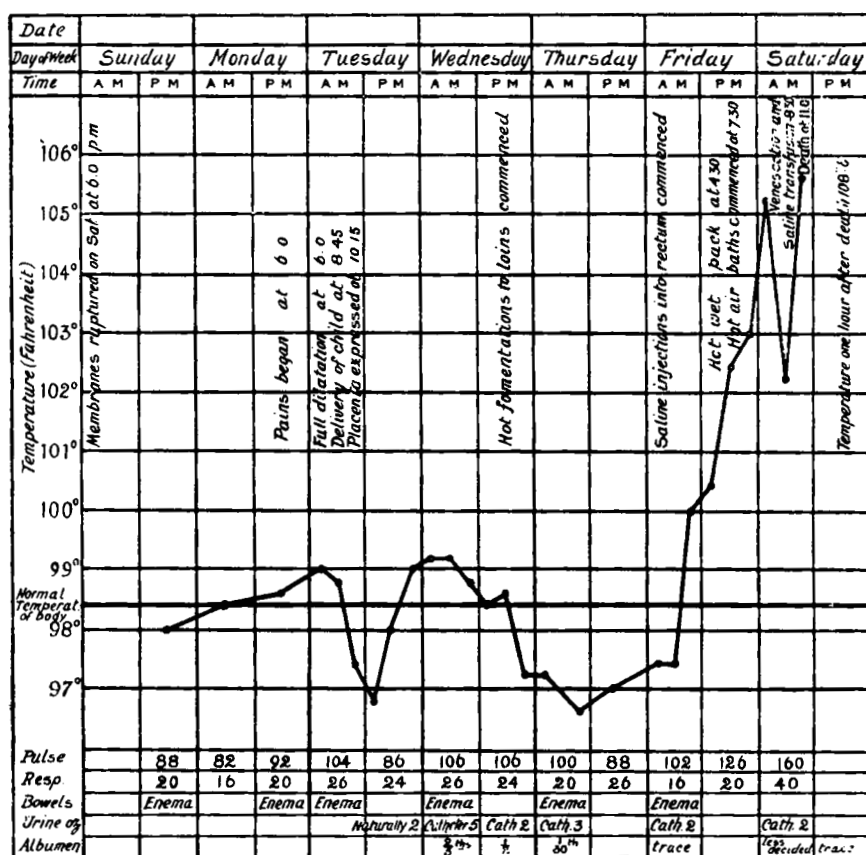
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WITHIN the last year I have met with two cases of partial suppression of urine, both terminating fatally, one four days after labour which took place a week before the full time, and the other a fortnight after a five months' miscarriage. The features of the illness in each case presented much in common. In neither case were the symptoms, till shortly before death, such as to draw attention to the exceedingly grave condition of the kidneys.

The first case was that of a lady about thirty years of age. She had previously had two miscarriages when about three or four months advanced in pregnancy. For neither of these miscarriages could any special reason be suggested. I learnt subsequently from the doctor who attended her in the first miscarriage (which took place about eighteen months previously) that the urine then contained albumen in considerable quantity. The second miscarriage was followed by an attack of sepsis and excessive loss, for which the uterus was curetted. In the last pregnancy a slight and transitory loss occurred at the second month. She first came under my observation when she was four months and a half pregnant. At that time, and when I saw her again six weeks later, the uterus felt unusually bulged on the left side of the fundus, as if by a fibroid, but six weeks later still, this bulging was no longer apparent. She was a very well-developed and well-nourished woman, of somewhat excitable temperament, who had apparently enjoyed good health. But during this pregnancy she had been troubled by an irritable cough and disturbed sleep, and suffered from repeated gastric attacks.

The labour was rather severe, the membranes having ruptured prematurely (Saturday at 6 p.m.), a week before the full time, and the pains began forty-eight hours afterwards. For two hours before the completion of the first stage the pains were severe and almost continuous. When I entered the room I found the patient kneeling

up on all fours with the object of obtaining relief (Tuesday, at 6 a.m.). The head was then just beginning to pass through the cervix and to descend into the pelvis. Chloroform was administered during the pains. The head slowly descended. The second stage was completed in two and three-quarter hours. During the last half-hour the pains began to flag, and the patient to show signs of exhaustion ; but just as the forceps were about to be applied delivery took place (Tuesday, at 8.45 a.m.). The placenta was expressed one and a half



hours afterwards. No evidence of the fibroid (the presence of which was at one time during the pregnancy suspected) could then be found. The child's head had undergone considerable moulding. Artificial respiration for at least five minutes was requisite before he would breathe naturally. For nearly a month subsequently the infant had slight fits and frequent convulsive movements, which gradually lessened and finally ceased. Since then he has made good progress.

Towards the end of labour and for some hours afterwards the patient was sick, and brought up a quantity of brownish fluid. Everything given by mouth—even water in teaspoonful doses—was rejected. As she was rather exhausted, rectal feeding was at once commenced. The pulse was 80 (beyond which point it never sank), and was of fair volume.

About eight hours after labour the patient passed 2 ounces of urine naturally (Tuesday, at 6 p.m.). No urine was passed during the following eighteen hours, but on passing the catheter 5 ounces of urine were drawn off (Wednesday, at noon). This urine was dark in colour, and, on examination, proved to contain two-fifths albumen after boiling with acid and standing for twelve hours. No casts or blood could be detected under the microscope. Hot fomentations were at once applied to the loins. At this time a distinct icteric tint of the conjunctivæ was noticeable, but it passed off in a day or two. Eighteen hours after delivery the sickness had entirely ceased, and six hours later feeding by the mouth was recommenced. The rectal feeding was at the same time continued. By catheter only 2 ounces of urine could be obtained, and this deposited one-half albumen (Wednesday evening).

Thirty-three hours after delivery (Thursday, at 6 p.m.) the sickness returned, but there was no headache, no drowsiness, and no interference with vision. The merest trace of pitting could be obtained by firm pressure over the tibiæ. On inquiry it was elicited that there had been slight backache till the fomentation was applied, but no spontaneous complaint of it had been made. Rectal injections of saline fluid, 1 pint at a time, were also given next morning in order to induce the kidneys to act, but without effect. In the twenty-four hours 3 ounces of urine only could be obtained. The amount of albumen, however, had fallen to one-thirtieth. A few casts were found under the microscope. A hot wet pack was given (Friday, at 4.30 p.m.), but produced no appreciable amount of perspiration.

Twitching of the fingers began eighty-one hours after delivery (Friday, at 6 p.m.). A hot air-bath was then given, and was repeated twice. It produced a copious perspiration, but still not more than 2 ounces of urine could be obtained in the next twenty-four hours. The albumen, however, had further diminished. The patient was at that time able to take liquid nourishment by the mouth, and was fully conscious. She slept for some hours.

The temperature, which had hitherto been normal or subnormal, towards the evening of that day (Friday) began to rise, and during

the following night reached  $105^{\circ}$ ; the face became dusky, the breathing laboured, and consciousness was lost. The twitching of the muscles increased and involved the face. Bleeding to the extent of 40 ounces, with subsequent transfusion of saline fluid into the vein, produced but slight and transitory improvement (Saturday, at 8.30 a.m.). The coma deepened, and eight hours from the time that consciousness was lost the patient had one slight convulsion and died (Saturday, at 11 a.m.). The temperature taken one hour after death was  $108.6^{\circ}$ .

It may be noted that in this case there was never complete suppression of urine, but that from the time of delivery till death, four days and two hours afterwards, not more than 16 ounces were secreted. The progressive diminution of the albumen is worthy of note. The vomiting, which was at first regarded as, and probably was, gastric in character, like that during the pregnancy, subsided and then returned. Apart from the vomiting, no urgent symptoms were present till eight hours before death, though slight twitchings had already been noticed nine hours earlier. Had I not examined the urine on the day following labour, the exact nature of the illness might have passed unrecognised till the day before it terminated fatally, and might possibly have been mistaken for one of acute septic poisoning. In this case certainly no time was lost in applying active remedial measures, but unfortunately they all failed to re-establish the function of the kidneys.

The second case occurred in a young and well-developed and well-nourished woman, who had not been pregnant before. It should be mentioned that the miscarriage, which took place when she was five months pregnant, may have been brought about by her having taken large doses of tincture of gossypium, and possibly also by mechanical means. She took a Turkish bath, which was followed by a chill, on the day prior to the miscarriage, and this may have affected the kidneys, as well as assisted to bring on miscarriage. In this case, therefore, the kidney affection cannot be said with any probability to have terminated the pregnancy prematurely. The membranes were retained, and were removed by the introduction of two fingers into the uterus. A sublimate douche was subsequently given, and was once repeated afterwards.

Vomiting commenced at the time of the miscarriage, and was very persistent. Next day the conjunctivæ were distinctly jaundiced, and remained so for a week.

I was called to see her in consultation eleven days after the miscarriage had taken place. The temperature was  $98^{\circ}$ , the pulse 48,

dicrotic, and rather feeble. But the patient, in spite of the persistent vomiting, appeared to be by no means seriously ill. She complained of the distress caused by the sickness, and of pain in the region of the gall-bladder. The urine up to that time had not been tested, and at my visit none could be obtained, and no very reliable information could be gained as to the quantity passed. The bowels had been relieved by a calomel purge, and had been kept open by enemata. Among the numerous remedies tried nothing had been found to check the sickness. Rectal feeding was suggested.

Two days later the patient became rapidly worse. At that time, certainly, but little urine was passed, which on being tested was found to contain some albumen, blood, and a few casts. The vomiting was incessant, the pulse continued slow, and the temperature sub-normal. A semicomatose condition supervened, in which the patient died sixteen days after the miscarriage.

On post-mortem examination the liver was found to be paler and softer than natural; the kidneys were enlarged, very much congested, and showed evidence of old-standing disease of moderate degree, and also of recent acute inflammatory softening. There was some excess of fluid (slightly blood-stained) in the peritoneal, pleural, and pericardial cavities. Distinct indications of some blunt-pointed instrument having been passed were found in the cervix, but whether this had taken place before or after the miscarriage could not be determined.

On the only occasion on which I saw this patient during life there was no headache, drowsiness, disturbance of vision, backache, or œdema, and, as far as could then be ascertained, the urine was passed in sufficient quantity. There were reasons for regarding the vomiting as gastric in character, and when I saw her in consultation I quite failed to recognise the gravity of the condition. Nor does it appear that when, two days later, the patient was taken worse, and the urine had been examined, that the condition of the kidneys was recognised, or that any active measures were adopted with a view to combat the renal inadequacy.

Both these cases go to show that a grave condition of the kidneys may exist with little beyond persistent vomiting to indicate danger till shortly before death. The first case, in which saline injections, both into the rectum and into the veins, were included among the measures early adopted and actively persisted in, affords but slight hope of re-establishing the function of the kidneys in such cases.

In both these cases long-standing kidney disease undoubtedly existed, and the question suggests itself whether absorption from the

use of sublimate douches at the time of delivery may not have played at least a part in inducing the active mischief. In the case following miscarriage I was consulted by the doctor first in attendance with the special object of determining whether the symptoms might be attributed to mercurial absorption; consequently, particular attention was directed to this point. But none of the usual indications of mercurial absorption were found, nor were there any indications in the bowel post-mortem. And in the other case, the patient was throughout under my immediate observation, but nothing pointing to mercurial absorption was observed. At the same time I think, seeing that absorption occurs even when only a single douche has been given, that it is quite possible that the passage of a mercurial compound through a previously damaged kidney, though insufficient to produce definite indications of mercurialism, may possibly have played a part in setting up the acute mischief which caused suppression.