A Case of Retroversion of the Gravid Uterus complicated by Overdistension of the Bladder and Hæmaturia.*

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I AM indebted to Sir Francis Champneys for permission to record the notes of the following case, which presents some unusual features in its clinical history:—

G.P., a housewife, aged 35 years, sought advice in the out-patient department of St. Bartholomew's Hospital on January 27 1912 on account of inability "to hold her water."

Past history. Previous pregnancies 6, children 6, the last on March 29 1910. Menstruation was regular and normal; the last regular period ended at the end of September 1911; since then amenorrhœa.

History of present condition. Amenorrhœa since the end of September 1911; morning sickness began in October, and the breasts enlarged, the patient being pregnant. On January 8 the patient experienced a severe attack of pain in the lower part of the abdomen, and the following morning was only able to pass urine with difficulty. The amount passed was scanty. A doctor was called in, who advised the passage of a catheter, but the patient assured him that she had passed her water. Her doctor was satisfied with this, and a catheter was not passed. For the next seven days the patient continued to suffer pain in the bladder region, and could only pass urine with difficulty. For the fortnight previous to being seen at Hospital she was unable to hold her water; she had to pass it every hour during the day and about 10 times at night. During this time she also noticed that her abdomen rapidly increased in size, and that her legs became swollen. She then came to Hospital, and was seen in the out-patient department by Dr. Griffith, who found the abdomen enormously distended. A tumour was outlined which extended to within an inch of the costal margin. It felt tense and elastic, and had the characters of a large ovarian cyst. A catheter was passed, and seven pints of clear urine were withdrawn. The abdominal tumour then disappeared.

The patient was then admitted to Martha Ward, and it is noteworthy that $3\frac{1}{2}$ hours after the passage of this large amount of urine a catheter was again passed when $3\frac{1}{2}$ pints of urine were withdrawn.

* Report of case read at meeting of Royal Society of Medicine.

This urine was examined, and the following report was made: sp. gr. 1005, faint cloud of albumen, no blood corpuscles, slightly alkaline.

The following note was dictated by Sir Francis Champneys shortly after her admission:—

“Both thighs and legs, especially the left, are œdematous.”

Per hypogastrium. “Rising out of the pelvis to one inch above the navel is an elastic tumour dull to percussion.”

Per vaginam. “The cervix is almost out of reach, high up and behind the symphysis, and pointing forwards. The sacral hollow is occupied by an elastic tumour which fills the pelvis.”

A rubber catheter, *i.e.*, No. 5, was then passed and 28 ozs. of bloody urine were withdrawn, about three minutes being occupied in its withdrawal. Bleeding then ceased. The pelvic tumour was now displaced upwards by the fingers, the patient being in the left lateral position.

Note of bimanual examination after reposition of the tumour. A mass like the gravid uterus of the 3rd month is felt lying above the brim and extending into the abdomen. A rubber ring of 3 inches diameter was inserted into the vagina. (By the pelvic brim is meant a line joining the top of the pubes to the promontory of the sacrum.)

Pathological report on blood-stained urine. Sp. gr. 1018; reaction alkaline; albumen present, 0.45 Auprecht; sugar absent; bile absent; pus absent; urea 1.7; blood, quiac test positive, red blood corpuscles present; no casts; film and culture showed no micro-organisms.

Further history of the case. A rubber catheter was inserted for the next 12 hours after the examination, and during that time no more blood was passed in the urine.

The patient was given urotropin, and the catheter was passed regularly every four hours for the next four days, after which date its use was discontinued. The urine on one occasion only contained a few red corpuscles and leucocytes. There was at no time any evidence of cystitis.

The patient was discharged on February 5, and when seen nine days ago was still in good health. The ring is no longer worn, the uterus is large enough to remain above the brim, the urine is passed without difficulty, and is sterile and contains no blood corpuscles. The bladder sound now passed 4 inches only.

Remarks. 1. Hæmaturia in association with retroversion of the gravid uterus is a well-known complication, but in all the cases which I have been able to find recorded the hæmaturia has been caused by the accompanying cystitis. In this patient, however, there was no evidence of cystitis, for no micro-organisms were found either on staining films or after cultivation. That cystitis did not supervene is somewhat remarkable.

2. The hæmaturia may have been caused by the rupture of a blood-vessel in the wall of the bladder or by a tear in its lining mucous membrane owing either to the overdistension of the viscus, or to the sudden relief of tension upon the withdrawal of the urine. Grosse, in a critical review of the causation of hæmaturia during pregnancy (*revue Mensuelle de Gynecologie*, March 1910), states that a tear in a large varicose vein of the bladder is a common cause. He mentions that the bladder has been opened in such cases, and the existence of a torn varicose vein demonstrated. These varicose veins are, in his opinion, due to the pregnancy just as are hæmorrhoids and varicose veins of the vulva.

Luys has examined the mucous membrane of the bladder during the latter months of pregnancy. In all cases so examined he has noted an intense vascularization of the mucous membrane, and some dilated and tortuous veins. These appearances have been specially remarked in the region of the trigone.

No cystoscopic examination was made at the time in the case now recorded, as it was feared that the manipulation might cause a recurrence of the bleeding. When the patient was again seen, nine days ago, the opportunity was taken of examining the bladder mucous membrane by the cystoscope, when a varicosity of the veins could be clearly demonstrated.