

Paper

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Vesico-Uterine Fistula following Caesarean Section

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Key Words

Vesico-uterine fistula

Menouria

Abstract

A case of vesico-uterine fistula is reported. Its symptoms and signs, differential diagnosis, and treatment are discussed.

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Introduction

Vesico-uterine fistula is a rare, but occasional complication of caesarean section through a transverse incision into the lower segment. Its symptoms and signs are amenor-rhoea, cyclic haematuria and/or oozing of urine through the vagina, depending upon the site of the fistula in relation to the internal os. The object of this paper is to draw attention to the symptoms, signs, differential diagnosis, and treatment of this rare condition and to report a case.

Case Report

A 28-year-old gravida II, para II. At her first delivery, 6 years previously, the patient had undergone caesarean section because of cephalo-pelvic disproportion. The course was uncomplicated. During her second labour there were again signs of mechanical disproportion, and another caesarean section was done. In the course of this operation it was noted that the urinary bladder was drawn up above the anterior surface of the uterus. The bladder was detached from the uterus, and no injury to the bladder was noticed. During the puerperal period the patient complained of ample oozing of aqueous secretion per vaginam. A suspicion of a fistula between the bladder and uterus and/or vagina was confirmed by cystoscopy. After filling of the bladder, part of the fluid passed through the uterine cervix. The patient was discharged with an indwelling catheter. Since the fistula was still present at the end of 6 months, she was re-admitted for operation. Urography had shown normal discharge.

Transperitoneal laparotomy disclosed a 2 × 2 cm defect in the anterior cervical wall below the internal os. The fistulous opening in the bladder was closed in two layers, and hysterectomy was performed, as it was not possible to close the cervical defect. The postoperative course was uneventful. An indwelling catheter was left for 10 days. The patient has been continent ever since.

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Discussion

Only a few cases of vesico-uterine fistula with urinary incontinence are on record (Kafet-soulis, 1974; Willson-Pepper, 1965). The most common cause of such a fistula is caesarean section through a transverse incision into the lower segment. 8 of 11 patients with vesico-uterine fistula had a history of caesarean section (Sammour, 1970). In some cases incontinence is absent, but the patients complain of amenorrhoea, and they have noted cyclic haematuria (menouria) (Youssef, 1957; Sammour, 1970). These symptoms are explained by the fistula entering the uterus above the isthmus. A 'valve mechanism' in the uterus may be the reason why some patients with vesico-uterine fistula have a one-way passage in the fistula, causing amenorrhoea and menouria without incontinence of urine (Youssef, 1957).

The present patient had incontinence of urine, but whether she would have developed menouria is unknown, as she had not yet started menstruating after the delivery. However, microscopic haematuria had been observed post partum.

Endometriosis in the bladder too may entail cyclic haematuria, but such patients also have bleeding per vaginam at the time of the menstrual period. Cystography and/or hystero-graphy can prove the presence of a vesico-uterine fistula (Youssef, 1957; Hudson, 1962). Owing to the urinary incontinence and the demonstration of a fistulous opening at cystoscopy, there were no differential diagnostic difficulties in the present case. The nature of the operative treatment depends upon the site and size of the fistula, the patient's age, and her desire to preserve fertility. Details of the surgical treatment have been described by Falk and Tancer (1956). Hysterectomy is preferred in women who do not want further pregnancies, while in young patients an effort is of course made to preserve the uterus. But if the patient does not want to preserve fertility, it may be necessary to hysterectomize, as in premenopausal women.

Conclusion

A fistula between the uterus and bladder arising after caesarean section most often manifests itself by oozing of urine through the vagina, in a few patients by cyclic haematuria and amenorrhoea. If cystoscopic examination is negative, cystography or hystero-graphy should be done.

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