



Case Report

Successful Repair of Iatrogenic Cyclical Menouria

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Abstract

Vesicouterine fistula (VUF) is a very rare occurrence and is estimated to occur in only (1-4%) of all genitourinary fistulas. It is an abnormal pathway between the bladder and the uterus. The most common cause is lower segment caesarean section. Patients usually present in the early post operative period with the problem of continuous urinary incontinence. On the rare occasion, recurrent urinary tract infection, recurrent gross painless haematuria, or secondary infertility associated with secondary amenorrhoea would be the presenting complaint. Among all vesicouterine fistula 90% are Youseef's Syndrome the least common of the urogynaecological fistulas. Youseef's syndrome is characterized by cyclic haematuria (menouria), absence of vaginal bleeding (amenorrhea) and urinary incontinence due to vesicouterine fistula (VUF).

Keywords: Vesicouterine fistula, Menouria, Hysterosalpingogram.

TAJ 2017; 30: No-1: 70-72

Introduction:

A vesicouterine fistula is an abnormal pathway between the bladder and the uterus. The first case was reported by Knipe and colleagues in 1908. Vesicouterine fistula is the least common of all the urogenital fistulas, representing 1–4% of all cases.¹ The vast majority of vesicouterine fistula are secondary to iatrogenic causes, the most common being lower segment Caesarean section.² The less frequent causes include induced abortion, dilatation and curettage, vaginal birth after previous caesarean section, obstructed labor, forceps delivery, placenta percreta, migrated intrauterine contraceptive device, and brachytherapy.² The main symptoms of VUF (vesicouterine fistula) are urinary incontinence,

cyclic haematuria present in a delayed fashion (menouria), amenorrhea and urinary tract infection. Most of the cases present from weeks to years after the inciting event.³ In such cases, the diagnosis is mainly established by clinical detection of urine or dye passing through the external cervical os or by means of a hysterosalpingogram or micturating cystourethrogram, which will demonstrate the fistulous communication.³ Conservative treatment may be appropriate in some cases, but surgery is the definitive treatment. Transabdominal, laparoscopic, or robotic methods can be used. We present a case with vesicouterine fistula after 2nd caesarean section; the patient presented with urinary cyclical haematuria and secondary amenorrhea for 1 year after giving birth.

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Case Presentation:

A 25 years old multiparous female patient admitted into our hospital with the complaints of cyclical haematuria and amenorrhoea for one year after giving birth of a dead baby by emergency cesarean section in a clinic. Patient history had no highlights except a lower segment Cesarean section by Pfannenstiel incision due to severe scar tenderness in previous year. The patient had perfect urinary continence and denied dysuria, nocturia and diurnal urinary frequency.

Physical examination was unremarkable except for a well-healed Pfannenstiel scar. There was no urine leak from the anterior vaginal wall or cervix during the speculum examination. In view of the past history of LSCS and menouria, diagnosis of VUF was considered.

USG (ultrasonography) showed normal uterine and adnexal structures.

In the OT under anaesthesia dye test was performed. After administering methylene blue through external uterine os, there was

an active outflow of methylene blue from bladder which was come out through foley's catheter. Then cystoscopy was done and a large opening was found in the base of the bladder.

After informing the patient and her relatives about the clinical situation thoroughly, laparotomy was decided. Abdomen was opened by excising the scar of previous operation. Bladder was cautiously separated from the uterus. There was about 3cm opening found in the base of the bladder. Uterus was damaged badly by adhesions. Total abdominal hysterectomy was done and the ovaries were preserved.

Then the bladder was repaired in two layers by 3,0vicryl. Catheter was kept for 21 days. After that, catheter was removed and the patient could void normally.

Discussion:

In 1957, Youssef described a syndrome comprising of cyclic haematuria, amenorrhoea, and complete urinary incontinence in a patient who

had lower segment caesarean section (LSCS).⁴ The VUF also occurs following high vaginal forceps-aided delivery, external cephalic version, curettage or manual removal of the placenta, placenta praecreta, myomectomy, uterine rupture due to obstructed labor, uterine artery embolization, perforation of an intrauterine device, and brachytherapy for carcinoma of cervix. The LSCS is the single most common cause of VUF.³ Amenorrhoea, cyclic haematuria without urinary incontinence in combination with a history of LSCS, has been described as pathognomonic of VUF.⁵ The clinical presentation is often nonspecific and findings on examination classically used to depict the fistula may be negative, leading to considerable delay in diagnosis.⁶ The VUF may not manifest with constant urinary incontinence because of a functional sphincter at the internal uterine os. Urinary incontinence occurs if the level of the VUF is at or below the internal os or if the os is incompetent⁵.

Conclusion:

Vesicouterine fistula, despite being infrequent, is no longer a rare diagnosis and is most commonly secondary to lower segment caesarean section. With patient history and selected investigations diagnosis is relatively easy. The surgical repair of these fistulae is standard treatment, especially with delayed fistula with achievement of total continence, and complete resolution of cyclic haematuria. Conservative management with continuous bladder drainage for 3 weeks along with antibiotics is recommended in cases where a small fistula is detected in early or immediate postpartum or postoperative period. Meticulous practice of obstetric and surgical principles during caesarean section can prevent the formation of these fistulae.

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