



A CASE REPORT ON YOUSSEF SYNDROME

Dr. K. Ramesh	M.S,M.Ch(Urology) Department of General Surgery, ASRAMS , ELURU.
Dr. B. Kalyan Vijay Kumar*	(PG) Department of General Surgery, ASRAMS , ELURU. *Corresponding Author
Dr. A. Yamini Deepthi	(PG) Department of General Surgery, ASRAMS , ELURU.
Dr. J. Mounica	(PG) Department of General Surgery, ASRAMS , ELURU.

ABSTRACT Vesicouterine fistula without vaginal leakage of urine, cyclic hematuria and amenorrhea is a rare condition, identified as Youssef's syndrome. The most common cause of this syndrome is trauma during a cesarean section. Different therapeutical approaches that include conservative treatment, fulguration, hormonal therapy and open, laparoscopic or robotic surgeries have been mentioned in the literature. Herein a case in a 37-year-old patient is reported. Conservative treatment with urinary drainage was successful because the fistula was recognized in the immediate postoperative period.

KEYWORDS :

INTRODUCTION :

Vesicouterine fistula accounts for 4 percent of genitourinary fistula. A vesicouterine fistula presenting with vesical menstruation and urinary continence was first reported in 1935. They are primarily a complication of lower segment Caesarean section and were extremely rare till 1947. The incidence has gone up since then, because of increasing rates of Caesarean sections. Unlike other genitourinary fistula, urinary incontinence is not an integral feature of vesicouterine fistula.

AIMS & OBJECTIVES :

To discuss the incidence, prevalence, clinical presentation, treatment options and precaution

CASE REPORT :

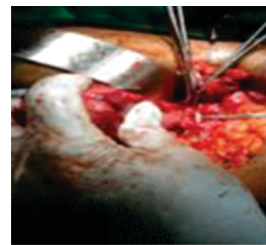
A 37 year old c/o pain in the left lower abdomen since 2 years with H/O cyclical haematuria since 17 yrs and H/O increased frequency of micturition. She has no history of white discharge/ burning micturition/ dyspareunia / postcoital bleeding/weight loss. patient had H/O two LSCS 19 and 17 years ago ;she takes mixed diet,sleep & appetite are normal,normal bowel habits .No significant family history noted. General condition : moderately built ,moderately nourished .Vital signs : Temp - afebrile, PR - 82 bpm regular ,BP 130/70 mm of Hg, RR 16/min On examination Per Abdomen was soft, caesarean scar was present ,no abnormality otherwise.Per vaginal/speculum & Per rectal examination was Normal. Ultrasound suggestive of anterior myometrial fibroid and bulky cervix with few nebothian cysts. Hysteroscopy revealed thickened endometrium,B/L tubal ostia patent. MRI Pelvis showed 1) fistulous connection between the urinary bladder & endocervical canal at uterocervical junction. 2) Focal adenomyosis of anterior wall of uterus & small anterior myometrial fibroid. Cystoscopy under local anesthesia revealed a 2cms X 1cm fistulous tract between the uterus and posterior bladder wall 2 cms above the trigone near the left ureteric orifice Operative Procedure :The fistula was repaired by total abdominal hysterectomy, excision of the fistulous tract, bladder repair done in two layers with Boari flap followed by DJ stenting of left ureter



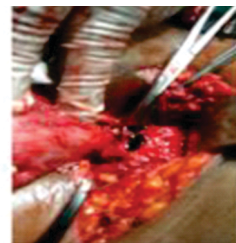
MRI pelvis showing contrast filling bladder ,ureter, uterus and the fistulous tract.



cystoscopy demonstrating fistula



Intraoperative picture demonstrating the fistulous connection between the bladder and uterus



Intraoperative photograph demonstrating dye entering the uterus from urinary bladder

Vesicouterine fistula without vaginal leakage of urine due to the sphincteric mechanism of the cervix was first described by Youssef in 1957. This rare condition represents only 1-4% of all urogenital fistulas,

although currently their prevalence is increasing because of frequent use of the cesarean section (CS). After CS the bladder gets so adhered to the uterus that it is subjected to severe tension during a following vaginal delivery, which may result in VUF formation. Clinical presentations include urinary incontinence, cyclic hematuria due to

menstruation through the bladder and amenorrhea. Recurrent urinary infections, secondary infertility and first trimester abortions are less common reasons for consultation. VUF usually generate psychological distress and have a negative effect on quality of life. The bladder may be damaged by direct injury, inadequate mobilization or aberrant suture³. This can be prevented by emptying the bladder and by carefully dissecting the lower uterine segment. Porcaro propose intraoperative sonography by the transvaginal (or transrectal) route when suspecting bladder injury while dissecting the uterine lower segment and for monitoring patients who already had a VUF repair. Moreover, ultrasound Doppler examination may help in better investigating and understanding the pathophysiology of VUF. Usually, VUF are discovered postoperatively. The accurate diagnosis is ruled out by showing the fistulous track by cystoscopy, retrograde cystography and hysterosalpingography. Methylene blue test, CT and magnetic resonance imaging (MRI), which are valuable for diagnosing vesicovaginal fistula, must also warrant consideration. Cystography and hystero-graphy shows fistulous track as an abnormal communication between the uterus and the bladder. Cystoscopy shows irregular hole or depression, which may be surrounded by edema and inflammation of the urothelial mucosa. CT and MRI may show the patency of the fistula. The therapeutical approaches include conservative treatment as well as open surgery. Traditional treatment of VUF is surgical closure via laparotomy, but a few cases of spontaneous closure of fistula caused by Cesarean section have been reported although the size of the VUFs was not documented. Conservative management with bladder catheterization, antibiotics, anticholinergics and induction of amenorrhea can be successful when, as in the presented case, the fistula is diagnosed within the first few days of surgery. If the fistula is not bigger than 0.5-1cm, it has a high spontaneous resolve or decrease rate with a 4-8 weeks trial of continued catheter drainage. If finished this term, the VUF has diminished in size; a trial of Foley drainage for an additional 2-3 weeks may be helpful. If no improvement is observed after a three month follow-up, a VUF is not likely to resolve conservatively. Under these circumstances, prolonged catheterization only increases the risks of infection and offers no increased benefit to fistula period. Spontaneous closure of the fistula in up to 5% of cases may be expected with the involution of the uterus. The ideal length of treatment is unknown as such as the adequate starting time, but this technique maybe less successful in women with a mature tract (6 weeks or longer). A proportion of this rare complication has been regarded as a certain type of endometriosis, which can provide an explanation for the efficacy of hormonal manipulation with contraceptive steroids. A combination of levonorgestrel 0.25 mg and ethinyl estradiol 0.05 mg daily for at least 6 months to induce amenorrhea may benefit patients with a small, well epithelialized orifice by the ectopic endometrial atrophy but a large established fistulous tract variably necessitates surgical repair. If hormone therapy fails, we would have to consider surgical treatment including less invasive procedures such as endoscopic fulguration of the fistula, which obtains spontaneous closure by destroying the ectopic endometrium, laparoscopic surgery or more recently, a robot-assisted laparoscopic repair. If the injury is discovered while performing surgery, it should be immediately repaired. Surgical repair may be performed 3 or 4 months after CS, because uterine involution has taken place and reaction to initial surgery should be minimal. Surgical repair of VUF could be performed by different approaches such vaginal or transvesical retroperitoneal but we prefer the transperitoneal route, which allows a satisfactory mobilization of both bladder and uterus.^{5,9} Open bladder surgery together with hysterectomy is also a choice of treatment, particularly for multiparous patients. Surgery is the mainstay and definitive treatment of VUF after CS but we think that conservative treatment should be tried first in small VUF discovered just after delivery. Bladder injury should be part of discussion with patients requesting elective CS.

CONCLUSION:

VUF diagnosis is not difficult; it is often accomplished by a combination of symptoms and patient history. Treatment is varied and includes conservative, medical, or surgical options. Total Abdominal Hysterectomy is advisable in patients for whom fertility is not desired.

REFERENCES:

1. Campbell textbook of urology. 2. Smith textbook of urology.
2. Tancer. M.L. Vesicouterine fistula - A review: *Obstet. Gynecol., Surv.*, 1986;41:743-53.
3. Thanos, A., Paviakis, A.J. and Davillas, N. Vesicouterine fistula, *Urology*, 1986;28:426-8.
4. Raunch, R.J., Rodgers, MW. Spontaneous closure of a vesicouterine fistula following caesarean section. *JAMA* 1962;181:997-9.
5. Rubino SM. Vesicouterine fistula treated by amenorrhoea induced with contraceptive steroids. Two case reports. *Br. J. Obstet. Gynaecol.*, 1980;87:343-4

7. Youseff, A.F. Menouria following lower segment caesarean section. *Am. J. Obstet. Gynecol.* 1957;73:759-67.
8. Machado, L.M. Vesico-cervical fistulas after caesarean section. *Rev. Fr. Gynecol. Obstet* 1935;29-471.
9. Hudson, C.N. Vesicouterine fistulas after caesarean section *J. Obstet. Gynecol. Brit. Comm. With.*, 1962;69:121-4.