



Laparoscopic repair of uterovesical fistula

Suyajna D Joshi, Ramesh B, Ratna Suyajna Joshi, Veerendra Kumar

Department of Gynecology and Laparoscopy, Geetha Fertility and Endoscopy Center, Bellary

Key words : Youssef's syndrome, uterovesical fistula

Introduction

Uterovesical fistula is rare. It could be the result of obstetric trauma or surgical injury.

Case report

A 28 year old P2 L1 lady, presented with secondary amenorrhea of 13 months duration. She also complained of passing cyclical red colored urine. In her first pregnancy, she underwent emergency lower segment cesarean section for premature rupture of membranes. In her second pregnancy she had trial of labor for vaginal birth but underwent emergency laparotomy for scar rupture . A still born fetus was lying in the peritoneal cavity. Scar repair was done. There was no urinary incontinence. Postoperatively, she developed deep vein thrombosis and was treated with anticoagulants for 9 months. In the 10th postoperative month, she passed red colored urine and since then had cyclical hematuria for 5 days every month. History, hysterosalpingography (Figure 1), and cystoscopy

confirmed the diagnosis of Youssef's syndrome. On 12th January, 2003 she underwent laparoscopic repair of the uterovesical fistula which was situated in the supratrigonal region. Ureteric orifices were intact. The bladder was adherent to the lower segment and was released by sharp dissection. A fistulous opening in the posterior bladder wall (Figure 2) was closed by 2-0 vicryl. Omentum was interposed between the bladder and uterus. Foley's catheter was removed on the 21st postoperative day. She had normal menses in February 2003 and there was no incontinence or cyclical hematuria. She is having regular cycles since then.



Figure 1. Hysterosalpingography showing uterovesical fistula

Paper received on 03/12/2003 ; accepted on 25/05/2004

Correspondence :

Dr. Suyajna D Joshi

Geetha Nursing Home, K. C. Road,

Bellary 531 101.

Tel. 08392 - (O) 274844 (R) 274342 Email: suyajna@yahoo.com

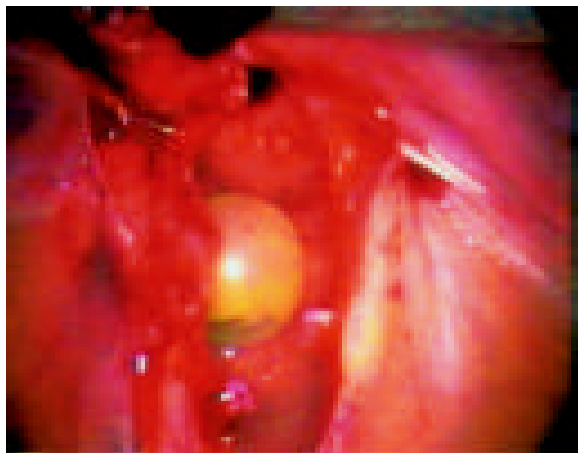


Figure 2. Foley's catheter bulb seen through the uterovesical fistula.

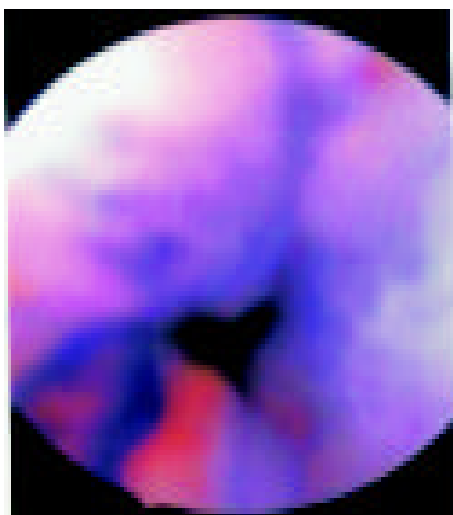


Figure 3. Cystoscopic view of uterovesical fistula after methylene blue instillation in the bladder.



Figure 4. Hysteroscopic view of the uterovesical fistula.

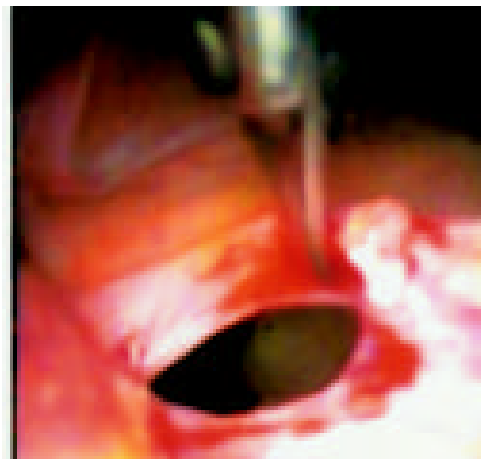


Figure 5. Laparoscopic view of the uterovesical fistula after freshening the edges

Discussion

Nowadays uterovesical fistula is very rare because of improved obstetric practice. Most of them are associated with birth injury to or necrosis of the bladder wall directly over the dehiscence of a lower segment cesarean section scar¹. Very rarely these fistulas occur due to instrumentation or malignancy. When there is inadequate mobilization of the bladder inferiorly or laterally the bladder may be injured with delivery of a large fetal head or it may be accidentally included in the suture used to close the uterine incision. Fistula forms when sutures are absorbed². A woman may experience involuntary loss of urine or she may remain continent. She may complain of cyclical hematuria and amenorrhea. This symptom is called menuria of Youssef. Vaginal examination fails to reveal a fistula though occasionally trickling of urine is seen through cervical os. Cystoscopy, cystogram and/or hysteroqram are useful in diagnosis. The vesical orifice of the fistula is always in the supratrigonal location when viewed through the cystoscope³. Although few small fistulas have been reported to close either spontaneously or through cystoscopic fulguration, most of them require surgery³. A hysterectomy is not required for fistula repair⁴. Hysterectomy may be done, if indicated for other reasons including the

presence of large uterine defect. Laparoscopic surgery is rapidly replacing laparotomy in many areas. The present case appears to be the first ever reported laparoscopic repair of uterovesical fistula.

References

1. Yip SK, Leung TY. Vesicouterine fistula: an updated review. *Int Urogynecol J Pelvic Floor Dysfunct* 1998;9:252-6.
2. Issa MM, Schmid HP, Stamey TA. Youssef's syndrome : preservation of uterine function with subsequent successful pregnancy following surgical repair. *Urol Int* 1994;52:220-2.
3. Lenkovsky Z. Vesicouterine fistula: a rare complication of cesarean section. *J Urol* 1988;139:123-5.
4. Tancer ML. Vesicouterine fistula : a review. *Obstet Gynecol Surv* 1986;41:743-53.