

Cyclical Haematuria sequel to uterine Myomectomy: A case report

*P. I. S. Okafor, J. C. Orakwe and O. O. Mbonu.

Department of Surgery, Nnamdi Azikiwe University Teaching Hospital,
Nnewi, Anambra State, P. O. Box 5025, Nigeria.

Summary

A thirty-year old married nulliparous lady had a difficult myomectomy done by a general practitioner one year prior to presentation. Two months after the operation, she had her menstruation, but with a concurrent total, painless haematuria. This combination continued for nine months before her family physician referred her to the urological clinic.

Full urological work-up revealed an iatrogenic vesico-uterine fistula, but the features were not consistent with those of the classical vesico-uterine fistula syndrome.

Transabdominal fistulectomy not only controlled the haematuria but also helped the patient to achieve a viable pregnancy.

Keywords: *Iatrogenic vesico-uterine fistula, Cyclical haematuria, Transabdominal fistulectomy.*

Résumé

Une mariée sante enfant de trente ans avait en une myomectomie difficile faite pour un médecin generaliste un an avant sa presentation. Deux mois après l' operation elle avait en ses rgle mais avec une haematurie totale sans douleur. Cette combinaison a continué pendant neuf mis avant que le médecin de la famille la réfère chez un urologie.

La travail urologique a révélé un fistule vesico- uterine latrogenique mais les composantes n' étaient pas consistant avec ceux du syndrome de fistule vesico-uterine.

Une fistulectomie transabdoménale n'a pas seulement controle l' haematurie mais elle a aussi la patiente d'avoir une grossesse viable.

Introduction

Urological injuries during gynaecological and obstetric operations have been widely reported^{1,2}. Common sequelae of these injuries are vesico- vaginal fistula (VVF), uretero- vaginal fistula (UVF) and vesico- uterine fistula (VUF). Vesicouterine fistula (VUF) is the least common, representing only five percent of all urogenital fistulae³.

Most reported cases of VUF have been sequel to caesarian section⁴. Kleinhans et al⁵ reported that VUF could also develop from normal delivery, malignant tumours, and inflammatory lesions.

The classical syndrome of VUF- amenorrhoea, menouria, and urinary incontinence- was described by Yousef⁶. We are yet to find a report of VUF following a myomectomy, nor has there been a report of such fistula presenting with cyclical haematuria and concurrent vaginal menstruation, with total absence of urinary incontinence.

We hereby report a case with these features.

Case report

A thirty-year old married nulliparous lady was referred to our urological clinic with a ten- month history of total painless haematuria. The haematuria was cyclical, occurring only during what appeared to be her normal menstruation. She notices this two months after a myomectomy. The myomectomy was done by a general practitioner as part of the management of her four years of primary infertility. There was no history of a urinary incontinence.

She was admitted two days prior to the expected onset of her menstruation with the plan to investigating her during menstruation. The investigations done included the following:

Full blood count - showed a normal picture.

Continuous bladder drainage per urethram- confirmed that the "bloody urine" was actually from the bladder and not from the vagina.

Urinalysis with microscopy, culture, and sensitivity- this confirmed that the effluent from the bladder was haematuria, E. Coli was cultured and this was sensitive to ofloxacin (Tarivid).

Intravenous Urography (IVU)- showed a normal urinary tract. The cystographic phase, antero- posterior and lateral views, did not show any extravasation of contrast from the bladder.

Abdominal Ultrasonography- showed normal structures.

Cystoscopy with dye test using methylene blue- showed:

- The presence of an opening on the upper part of the posterior wall of the bladder through which blood was oozing into the bladder.
- Dye injected into the uterus through the cervical os entering the bladder through the identified opening.
- Clear urine spouting from the right and left ureteric orifices after the dye was washed out of the bladder and 20mg of frusemide injecting intravenously.
- Exudation of dye from the cervical os after injecting dye-coloured 500mls of normal saline with pressure into the bladder through the urethra. No VVF was identified.

All these tests confirmed that there was an abnormal communication between the uterus and the bladder. With the history of a preceding myomectomy, a diagnosis of iatrogenic VUF was made.

On the 8th day of her current menstrual cycle, a transabdominal, transperitoneal fistulectomy was done. At laparotomy, the fistula was identified between the anterior wall of the body of the uterus, well above the lower segment, and the upper part of the posterior wall of the bladder. The fistulous tract was excised together with the surrounding scar tissues in the bladder and the uterus. The uterine and the vesical defects were closed separately in two layers. The exposed areas of the bladder and the uterus were separately re-peritonised. The laparotomy wound was closed in layers. Recovery was uneventful.

The patient was followed up for two-and-half years. Normal vaginal menstrual flow was resumed six weeks after the operation and thereafter continued rhythmically until the patient became pregnant eighteen months later. There was no haematuria any more.

She had a spontaneous vaginal delivery of a healthy male baby on the 27th month after surgery.

Discussion

This case is a peculiar presentation because reported cases of VUF presented with absolute menouria with or without incontinence of urine^{4,6}. The predominant symptom in VUF probably depends on the level of the fistulous communication between the urinary bladder and the uterus; when it is above the internal os, menouria may occur and when it is below it, urinary incontinence results⁴. In this case, the fistula was between the body of the uterus and the upper part of the posterior wall of the bladder.

This high position of the uterine opening of the fistula might

* Correspondence

have accounted for the absence of urinary incontinence and the concurrent menouria and vaginal menstrual flow.

In the literature myomectomy has not been identified as a course of VUF. In our case, the history suggests that poor surgical technique caused this injury which could not be recognised intra-operatively during an apparently difficult myomectomy.

It is interesting that the cystographic phase of the IUV did not show any extravasation despite the fact that methylene blue, injected with pressure through the urethra at cystoscopy, was seen exuding from the cervical os. The muscular nature of the body of the uterus which surrounds the uterine end of the fistula might have acted as a valvular mechanism which allowed free flow of dye, and indeed menstrual flow, only from the uterus to the bladder and not vice-versa except under very high pressure.

Our patient was treated with a transabdominal, transpirational fistulectomy but other methods of treatment have also been used successfully^{4,7,8}.

This case again emphasises the need to safeguard the bladder during all pelvic operations including myomectomies.

References

1. Selzman A A and Spirank JP: Iatrogenic ureteral injuries; A 20-year

experience in treating 165 injuries. *J. Urol.* 1996; 155: 678-881.

2. Eisentop S M, Robin Richman and Lawrence D. Platt et al: Urinary tract injury during caesarian section, *Obstet. Gynaecol.* 1982; 60:5:591 - 596.
3. Buckspan M N, Smina S and Klutz B C: Vesico-uterine fistula; A rare complication of caesarian section. *Obstet. Gynaecol.* 1983; 62:645.
4. Iloabachie G C and Njoku N.: Vesicouterine fistula. *Brit. J. Urol.* 1985; 57:438-439.
5. Kleinhans G, Kristek J and Cirkelu P.: Vesicouterine fistula, *Urologie*, 1986; 25 (6):351.
6. Yousef A G: Menouria following lower segment caesarian section. *Am. J. Obstet. Gynaecol.* 1951; 73:759-767.
7. Hassan M A and Kafafi S M: Endoscopic fulguration of vesicouterine fistulae. *African J. Urol.* 1988; 4;1:42-46.
8. Kumar A, Viadyanathans S, Sharma S K, Sharma A K and Goswami A K: Management of vesicouterine fistula: A report of six cases, *Int. Gynaecol. and obstet.* 1988; 26(3):453.