VESICO-VAGINAL FISTULA OF RARE ETIOLOGY

A CASE REPORT

by

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Several recent papers from different parts of the world demonstrate the changing etiology of this most distressing and deplorable of all infirmities to which an unfortunate woman is liable. This case is presented because of its extremely rare etiology. An intensive search of the literature did not reveal any case where a fistula resulted from the perforation of tubercular ulceration of bladder. Everett mentions one case in which instrumentation of bladder for cystitis of tubercular origin resulted in fistula. In that case, however, the fistula was caused by instrumentation and not by spontaneous perforation of an ulcer.

Case History

Patient R. D., Hindu, aged 45 years, was admitted to the gynaecological ward on 24th June 1959. She complained of dribbling of urine for the last 20 days only. There was no history of any recent delivery, no history of any recent abdominal or vaginal operation, no history of injury or irradiation. There was not any kind of discharge per vaginam prior to dribbling of urine. However, she gave history of low grade temperature for the last 3 months.

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Bowels: Regular. Micturition: Normal Menstrual history: Attained menopause 11 years ago. Obstetric history: Married 30 years ago, no conception. Widow since 6 years.

Past history: Nil of importance.

Examination on admission: General condition fairly good.

No apparent anaemia. Pulse 88/min. good volume and tension.

Temperature—Normal.

Blood pressure: 115/80 mm. of Hg.

Cardio-vascular system and Respiratory system: Nothing abnormal detected.

Per abdomen: Moving well with respiration, soft. No tenderness or rigidity anywhere. No viscera palpable.

On vaginal examination: There were mild excoriations of vulva present. Cervix forwards, uterus retroverted mobile, normal in size, fornices were clear. There were two small vesico-vaginal fistulae about 1" above the uretheral orifice more towards the right of the midline.

Investigations

Blood: Hb—8.5 gms. per cent. RBC—2.7 million/cubic mm. WBC—4350 million/cubic mm. Diff. count: Polymorphs, 60 per cent; lymphocytes 39 per cent; eosinophils 1 per cent.

Urine: Specific gravity, 1008; albumin, traces: sugar, nil; Mircos, examination, few epithelial cells. Blood urea: 33 mgms. per cent.

Intravenous pyelography. On 1st July 1959—showed non-functioning kidney on right side and some opaque shadows on right side. Left kidney function was normal.

Surgical opinion was sought and a retrograde pyelography was advised.

Cystoscopy and Retrograde pyelography done on 9th July 1960. While doing cystoscopy two small vesico-vaginal fistulae were detected. Bladder was filled by putting a finger across the fistulae in vagina. On cystoscopic examination left ureter could be seen but right ureter could not be visualized properly. There was ulceration around the opening of the right ureter and fistulae. Catheter could not be passed in right ureter on repeated attempts.

On 11th July 1960, she was transferred to surgical unit.

During the brief stay of the patient in the gynaecological ward, she had temperature for first three days after admission—maximum range 101°F. The temperature responded to strepto-penicillin. She started running temperature after retrograde pylegraphy and was again on strepto-penicillin for few days.

After bringing her Hb to 10 gms. per cent patient had right nephrectomy on 22nd October 1959. The kidney was firmly adherent to the adjoining structures.

Histopathological report was chronic tubercular kidney with marked destruction of kidney substance.

Post-operative period was febrile and patient had broad spectrum antibiotics for that. On 6th November she had pain in the right side of chest and developed pleural rub. X-ray showed pleural effusion right side. She was given streptomycin and I.N.H. and effusion cleared up. She had in total 74 gms. of streptomycin.

Patient was transferred back to the gynaecological ward on 14th January 1960 for repair of vesico-vaginal fistulae. Blood urea was 60 mgms. so intravenous pyelography could not be done.

X-ray chest was clear except for residual thickening of pleura on the right side.

Cystoscopy repeated on 12-2-60: Bladder mucosa was healthy. As the patient was dribbling all the time, she was subjected to surgery, although she was a poor risk.

Repair of fistulae was done on 26-2-60 under general anaesthesia. There was granulation tissue along the edges of the fistulae and they were about 1/4" apart and about 1/3" in diameter each. The intervening part was cut so as to turn it into one big fistula and the whole edge of the fistula was excised. Repair by flap-splitting method was done. The vaginal flaps were overlapped and stitched with nylon.

Bladder capacity was found to be markedly reduced.

Post-operative: Blood pressure was maintained above 100 systolic. She was given streptomycin and I.N.H.

In-dwelling catheter was left in for 2 weeks. Post-operative period was uneventful, catheter was removed after 2 weeks and there was no incontinence of urine. Nylon sutures were removed after 2 weeks.

Histo-pathological report of granulation tissue: Chronic nonspecific inflammation. No definite evidence of tuberculosis.

Follow up: Patient was re-examined after 1 month. She maintained good health and had no complaint of dribbling of urine. She has been attending out-patients after every 3 months. She enjoys good health with no urinary complaints.

Prognosis: Requires a good follow-up of the case as recurrence of tuberculous ulceration may follow.

Discussion

Vesico-vaginal fistula is still a common malady in our country, particularly amongst the villagers. Obstetric trauma by pressure necrosis is the major etiological factor in the East.

The etiology is changing in the more advanced countries where operative trauma, malignant diseases of cervix, vagina and bladder and radio-therapy account for the majority of the cases.

Amongst the rare causes listed are (1) trauma produced in defloration of newly married girls with vaginal atresia, (2) due to neglected ill-fitting pessary or foreign body in the vagina or bladder, (3) large vesical calculus,

(4) ulceration by syphilis, bilharzia or lymphogranuloma, (5) infection forming abscess between bladder and vagina, (6) accidental trauma, (7) instrumentation of bladder, and (8) during dissection of Gartners's cyst.

This multiparous, menopausal patient presented with two pin-point vesico-vaginal fistulae high up in the vault and to the right of the midline presumably near the right ureteric opening. She denied any history of vaginal trauma. A routine intravenous pyelography showed non-functioning right kidney which was later proved to be tubercular kidney by histopathology. A cystoscopic examination prior to surgery showed ulceration of bladder mucosa around the right ureteric opening and fistulous opening in the same area. In the absence of any trauma or malignant disease and because of the positive findings of tubercular kidney and tubercular ulceration of the bladder mucosa on the same side as the fistula, it is evident that the vesico-vaginal fistula followed perforation of the tubercular ulcer of the bladder.

Management of the case was not difficult. A good area of the bladder mucosa around the fistulae was excised and the fistulae repaired by flap-splitting technique. The histopathology showed chronic inflammation. The patient had already been treated with Inj. Streptomycin and I.N.H. which masked the histological diagnosis.

The follow-up showed perfectly well-healed scar with no recurrence for two years. This was expected as the offending kidney had been removed. Genito-urinary tuberculosis is a fairly common condition in this country but vesico-vaginal fistula following tubercular ulceration must be an extremely rare condition as it it is not recorded in the literature.

Summary

1. A case of vesico-vaginal fistula following tubercular ulceration of the bladder is described.
2. The etiology of common vesico-vaginal fistula is discussed and the rarity of the condition stressed.

References

Aldridge: Am. J. of Obst. and Gyn.; 44, 398, 1942.

Everett H. S. and Mattingly R. F.: Am. J. of Obst. and Gyn.; 72, 712-24, 1956.

Lavery D. W.: J. of Obst. and Gyn. Brit. Emp.; 62, 530-9, 1955.

Louw J. T.: South African Med. J.; 30(46), 1103-6, 1956.

Malifou: J. of Obst. and Gyn. Brit. Emp.; 405, 1938.

Moir J. C.: Am. J. of Obst. and Gyn.; 71, 476-91, 1956.

Murray and Ahmed: J. of Obst. and Gyn. Brit. Emp.; 347, 1943.

Short C. R.: East African Med. J.; 33, 271-6, 1956.

Thompson: J. of Obst. and Gyn. Brit. Emp.; 52, 271, 1945.

Wapple C. L.: Western J. of Surgery, Obst. and Gyn.; 67, 227-9, 1959.
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