Urethrovaginal Fistula due to Prolapsed Cervical Myoma: A Case Report

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Abstract
The occurrence of cervical myoma is not common, but they merit special considerations in view of their proximity to important pelvic structures including ureters, their propensity to cause complications and the technical difficulty in their removal. Herein, we report the first case of urethro-vaginal fistula due to pressure effect of huge prolapsed cervical myoma.

INTRODUCTION
Cervical myoma constitutes 2% of myomas, occurring in the female genital tract. Cervical fibroids can cause pressure effect on nearby organs. We report the first case of an urethro-vaginal fistula due to pressure ischemic effect by a huge degenerated prolapsed cervical myoma.

CASE REPORT
A 50-year-old woman, para 5, had presented with complaints of urinary retention of 12 hours duration. She also complained of a progressive, painless mass coming per-vaginum for the last 6 months. This was associated with offensive purulent discharge with occasional blood tinge. There was history of menorrhagia, loss of weight and loss of appetite for the last 5 months. There was no past history suggestive of urinary infection or continuous dribbling or retention of urine. She had not received any treatment (hormonal or others) for her condition so far.

On examination, she was pale, malnourished with a body mass index of 17.7 kg/m². Per abdominal examination revealed a large mass corresponding to 20 weeks gravid uterus size arising from the pelvis. The mass was firm, non tender, well defined, with smooth surfaces and restricted mobility. Per speculum examination of vagina showed an oblong, 15 x 12 cm size, soft, pale-grey, non tender mass occupying the whole of vagina and a portion (6 x 6 cm) of it was lying outside the introitus. The mass was irreducible with areas of ulceration, hemorrhage, necrosis and offensive smelling purulent discharge. Bimanual examination was unsatisfactory. No fistula or dribbling of urine could be documented.

Investigations showed hemoglobin of 4.4 gm%, total leukocyte count of 11,400/cm³, Erythrocyte sedimentation rate (ESR) of 70 mm in 1st hour and microcytic hypochromic anemia on peripheral blood film. Her blood sugars, renal functions, liver functions and coagulation profile were normal. Urine microscopy showed 10 – 15 red blood cells/high power field (hpf), 20 – 30 white blood cells/hpf and 3 – 5 epithelial cells/ hpf. Transabdominal ultrasound and contrast enhanced tomography revealed a large well defined soft tissue density mass arising from the posterior wall of uterocervical junction with a huge exophytic component. The uterus was enlarged and was displaced anteriorly and the mass was protruding inferiorly. There were no adnexal masses and the rest of the abdomen was normal. Intravenous pyelography showed diffuse haziness over the pelvis and lower abdomen due to the mass. About two-third of both ureters were displaced laterally and the urinary bladder was pushed anteriorly. There was no hydroureteronephrosis. No fistula between vagina and urinary tract could be demonstrated. Colonoscope could see the normal bowel mucosa up to 50 cms, but there was evidence of extrinsic compression over rectum. Surgery was planned after controlling the local infection and blood transfusions. A combined abdomino-perineal route was chosen in view of the doubt regarding diagnosis, associated large pelvic mass and the infected nature of the mass. Intra operatively, the uterus was enlarged with myohyperplasia. Both the tubes and ovaries were normal. The cervix was broadened and soft. Incision was given in the anterior surface of the uterus. This revealed a cervical fibroid polyp of 20 x 10 cm size arising from the posterior wall of uterocervical junction, enlarging the uterine cavity and...
prolapsing into the vagina and coming out of the introitus. (Figures 1a & 1b)

**Figure 1**
Figure 1a: Intra Operative photograph of the prolapsed fibroid showing the huge exophytic component coming out through the introitus.

The cervical myoma was removed through vaginal route and hysterectomy was completed by abdominal approach. Surprisingly, on removal of the myoma, an urethrovaginal fistula about 1.0 x 1.0 cm size was seen 1.5 cm away from the urethral meatus. The margin of fistula was ragged, inflamed and no fibrosis was seen. The formation of fistula was due to prolonged compression, ischemia and infection caused by the cervical fibroid. The fistula was not repaired at that time as there was high chance of failure due to infection and ischemia. In addition to that, the fistula was very low down in urethra, which usually does not make the women incontinent. With the consult of urologist, a 16 G catheter was inserted for 10 days. After removal of catheter at post operative day 10 she remained continent. The histopathology of the resected specimen showed leiomyoma of uterus with areas of hemorrhage and infarction. There was no evidence of malignancy. At 6 weeks follow up, the patient was continent and the size of fistula has reduced and hence, the fistula was left unrepaired.

**DISCUSSION**
The management of cervical myoma is a real challenge to the gynecologist. Besides the excessive menstruation, severe anemia and propensity to infection, long standing pressure on neighboring structures like ureters causing hydronephrosis and acute renal failure have been reported with this myoma. However, the pressure effect on urethra causing urethrovaginal fistula due to long standing prolapsing cervical myoma through the introitus have not been reported.

Cervical leiomyoma may elongate, prolapse out the uterine cavity and present with emergency like retention of urine. Uterine artery embolization, and laparoscopic-assisted uterine depletion of the myomas, may precipitate the degeneration and prolapse of exiting cervical myoma. Route and type of surgery should be planned in advanced especially in nulliparous woman. Ben-Baruch G et al have studied the immediate and late outcomes and recommended vaginal myomectomy as the initial treatment of choice for prolapsed pedunculated submucous myoma, except in those cases in which other indications necessitate an abdominal approach. In recent times, hysteroscopic myomectomy can be preferred if the myoma is small and the pedicle is accessible.

Regarding the need for hysterectomy in patients who have completed the family and not keen on preserving the uterus, the choice of route was analyzed by Benassi, L et al (2002). It was found that vaginal route is preferable to abdominal route as the operating- time, cost, postoperative fever, and need for analgesia are reported to be less without any significant difference in blood loss or other complications. In our case, a combined approach was used considering the confusion in diagnosis, large mass felt through the abdomen and inaccessibility of the pedicle of cervical myoma by a solitary vaginal route.

**References**
1. Bhatla N. Tumours of the corpus uteri. In: Jeffcoate's
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