Case Report:

A case of huge cervical fibroid with characteristic “Lantern on St.Paul’s Cathedral” appearance

Dr. Jayashree V, Mahjabeen B, Imran Thariq A.

Reader, Department of Obstetrics and Gynecology, RMMC, Annamalai University
Corresponding author: Dr. Jayashree V.

Abstract:
Cervical myomas arise from the smooth muscle cells of the cervix accounting for 2% of all uterine leiomyomas1. A cervical fibroid may press on urinary bladder and urethra and displace the urethrovesical junction giving rise to frequent micturition and urinary retention. Management of symptomatic huge cervical fibroid is hysterectomy or myomectomy and needs an expert hand. Here we report a case of huge cervical fibroid of size 15*12*10 cm and weighing 2 kg with typical “Lantern on St.Paul’s cathedral” appearance on naked eye examination.
Key words: Leiomyoma, Cervical fibroid, Myomectomy, Hysterectomy

Introduction:
Cervical myomas accounts for 2% of all uterine fibroids1. They are classified depending on the location into anterior, posterior, lateral and central cervical myomas.

Case Report:
Mrs. X, 42 year old para 6, live 4 tubectomized patient, reported at the gynaec OPD with complaints of mass per abdomen for one year which was increased in size for the past 2 months. She also presented with history of retention of urine for 2 days with no other menstrual irregularities. On examination, general condition of the patient was good. Abdominal examination revealed a firm mass of 20 weeks size with restricted mobility arising from the pelvis. On per speculum examination, a pinkish mass seen protruding through the vagina with minimal bleeding and cervix was not visualized. On per vaginal examination, a soft to firm mass of 20 weeks size was made out, cervix not felt and uterus could not be felt separately. Fullness was noted in all vaginal fornices.

USG Abdomen and pelvis showed a large mixed echogenic mass of 15*12*10 cm in the lower portion of the uterus suggestive of huge cervical fibroid with dilated pelvi-calyceal system on right side.

CT Abdomen and pelvis showed a large well encapsulated, lobulated soft tissue dense lesion of 15*12.6*10.7 cm with few areas of cystic degeneration noted in anterior, posterior and right lateral walls of lower body and cervix suggestive of cervical fibroid[Fig.1]. Upper body and fundus of uterus were displaced to the left side by the lesion with features of obstructive hydronephrosis.

At laparotomy, large mass of size 15*12*10 cm was seen occupying the pelvis with normal uterus on top with typical appearance of Lantern on top of St.Paul’s cathedral. Bilateral ureters identified and laterally placed with umbilical tape away from the area of dissection to prevent accidental injury. The
whole fibroid along with uterus, bilateral tubes and ovaries were removed in toto. The mass with uterus weighed 2.1kg [Fig.2].
Post operative period was uneventful and patient was discharged in good condition. Histopathological report showed leiomyoma uterus with scattered inflammatory cells on ectocervix suggestive of chronic non-specific cervicitis [Fig.3].

Discussion:
Fibroid is the commonest benign solid tumor of uterus arising from the neoplastic single smooth muscle cell of myometrium. Cervical fibroid is rare accounts for 2% of all uterine myomas. Supravaginal cervical fibroid may be interstitial or sub-peritoneal variety and rarely polypoidal. Depending upon the position it may be anterior, posterior, lateral and central. Interstitial growths may displace the cervix or expand it so much that the external os is difficult to recognise. All these disturb the pelvic anatomy and the ureter. Vaginal cervical fibroid is usually pedunculated and rarely sessile\(^2\). In pregnancy, cervical fibroid remains asymptomatic but it may cause obstruction during labor.
Symptoms are predominantly due to pressure effect on the adjacent structures especially on the bladder causing frequency and retention of urine\(^1\). In case of central cervical fibroid, cervix is expanded on all sides and uterus sits on the top of expanded cervix which gives Lantern on St.Paul’s cathedral appearance\(^4\). Anterior cervical fibroid produces symptoms like frequency or even retention of urine. Retention is more due to pressure than the elongation of the urethra. Rectal symptoms are more common with posterior cervical fibroid in the form of constipation. Lateral cervical fibroid causes vascular obstruction which may lead to hemorrhoids and edema of legs (rare). Ureter is pushed laterally and below the tumor.

Women with fibroids are only slightly more likely to experience pelvic pain than women without fibroids. Fibroid degeneration may cause pelvic pain. As fibroids enlarge, they may outgrow their blood supply, with resulting cell death. Types of degeneration determined both grossly and microscopically include hyaline degeneration, calcification, cystic degeneration, and hemorrhagic degeneration. The type of degeneration appears to be unrelated to clinical symptoms.

For symptomatic women, consideration of medical therapy, non-invasive procedures, or surgery depends on an accurate assessment of the size, number, and position of fibroids. MRI allows evaluation of the number, size, and position of submucous, intramural and subserosal fibroid and can evaluate their proximity to the bladder, rectum and endometrial cavity. Sonography is the most readily available and least costly imaging technique to differentiate fibroids from other pelvic pathology and is reasonably reliable for evaluation of uterine volume less than 375 cc and containing four or fewer fibroids\(^6\).

Treatment of huge cervical fibroid is either by hysterectomy or myomectomy and needs an expert hand\(^7\). Myomectomy may be tried if the patient is young and desirous of having a baby. Preoperative GnRH analogues administration for 3 months facilitate surgery and improve the hemoglobin status\(^8\). In vaginal part fibroids if the tumour is sessile, myomectomy and if pedunculated, polypectomy is done.

Conclusion:
Cervical fibroids accounts for 2% of all uterine myomas. Excessive growth of such fibroid may cause
pressure symptoms like urinary retention and ureteric obstruction. These huge fibroids can be successfully managed with hysterectomy or myomectomy with an expert hand. Although this kind of huge cervical fibroid is rare, it may masquerade as cervical malignancy; imaging techniques like CT are likely to falsely interpret such large cervical benign lesion as malignant due to radiological superimposition of lesion into adjacent structures like parametrium, bladder or rectum; Proper clinical evaluation is necessary to make an accurate diagnosis. This is presented for its rarity and confusing pre operative diagnosis.

References:


