



## LARGE CERVICAL FIBROIDS; A REAL SURGICAL CHALLENGE

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**ABSTRACT** Huge cervical fibroids are the real surgical challenge for the gynaecologists. We are discussing here two cases of large cervical fibroids; first case was a postmenopausal female with abdominal pain, and discharge through vagina and second case was woman of 37 years age with menstrual complaints mainly and bladder symptoms. First one was central and other one was posterior cervical fibroid. Presentations of both the cases were different and managed with different surgical approaches. Outcome were optimal with complete symptomatic relief.

**KEYWORDS :** cervical fibroids, ureteric stenting, Rutherford Morrison's technique,

### Introduction

Leiomyomas are the most common gynaecological tumour encountered in woman of reproductive age group. Their incidence is 20-50% (1). Most of the fibroids are situated in body of uterus, but up to 1-2% are confined to the cervix especially the supra-vaginal part (2). Depending upon the position, cervical fibroid can be anterior, posterior, lateral and central. Close proximity to other pelvic organs such as urinary bladder, ureters, bowel; give rise to the pressure symptoms like increased frequency of micturition, urinary retention and constipation. Sometimes, cervical fibroid with degenerative changes mimics an ovarian tumour and causes a clinical dilemma presenting as lump abdomen. Surgical removal of cervical fibroid is challenging because of the distortion of normal pelvic anatomy. Large central cervical fibroids sometimes pose great difficulty during surgery due to impacted uterus. So the surgical approach to be tailored depending upon the case as to prevent complications.

### Case 1

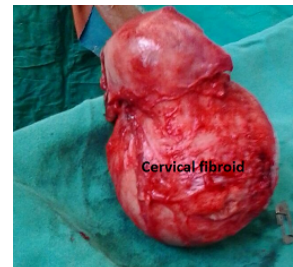
A 47 year old P3L3 postmenopausal woman, presented with complaints of pain in lower abdomen on and off for last 2 years and discharge per vaginum. The pain was insidious in onset, mild in intensity and radiating to back. Pain was intermittent dragging in character and associated with increased frequency of micturition. She also complained itching over vulva and discharge per vaginum for last one year. The discharge was copious, non-foul smelling and she uses 1-2 pads/day. She had no bowel or bladder complaints. Her past medical, menstrual and family histories were unremarkable.

Examination was done with prior consent from patient. Her vitals were stable. General and systemic examination revealed no abnormality. On abdominal examination, a smooth, firm, non-tender mass with side to side mobility; was arising from the pelvis and corresponding to around 24 weeks size uterus. On speculum examination, copious watery discharge was present and upper part of the vagina was occupied by a large mass with the cervix completely effaced over it. On the anterior aspect of mass; slough was present with superficial slight ulceration which bled on touch. On bimanual examination a mass of about 14\*12\* cm was felt arising from the uterus and cervix was completely effaced over it. Both the fornices were free. A provisional diagnosis of cervical fibroid was made.

Ultrasonography of pelvic region showed bulky uterus with large 10\*12 cm mass in lower part of the uterus. MRI revealed diffuse bulky and deformed uterus with uterine parenchyma nearly completely replaced by multiple fibroids showing intra-lesional degeneration and a large central cervical fibroid measuring 25.5\*14.7\*12.3 cm.

She was planned for total abdominal hysterectomy with bilateral salpingo-oophorectomy. Bilateral ureteric stenting was done as a

prophylactic measure. On laparotomy, uterus appeared to be normal size and morphology along with a large cervical fibroid of around 25cm\*20cm giving a typical appearance of Lantern on top of ST. Paul church. (Figure-1) Initially tubal structures were clamped and ligated taking care of ureters and then utero-vesical fold was raised and bladder was retracted down the cervical fibroid. Retroperitoneal dissection was done and uterine vessels were ligated at their origin. Removal of cervical fibroid along with uterus was done. Her intraoperative and postoperative period was uneventful. Histopathological examination confirmed the diagnosis of fibroid.



**Figure:1 Large central cervical fibroid with uterus**  
**Case 2**

A 37yr old P2L2A1, known case of type 2 diabetes mellitus and hypertension presented with complaints of menorrhagia for last 4 months, pain lower abdomen for one month and some mass protruding out of vagina for last 10 days. Patient had urinary frequency and urgency. She had a history of previous 2 LSCS. Her general and systemic examination were unremarkable. On per speculum examination a mass occupying whole of the vagina with overlying eroded and infected skin suggesting infected polyp. Cervix could not be demarcated distinctly. On bimanual examination a mass about 9\*8cm was felt with variable consistency, firm on upper part and soft on lower part. Uterus could not felt separately from the mass. She was admitted and routine investigation were done which revealed UTI and deranged blood sugar. USG showed normal uterus with ill defined heterogeneous, hyperechoic area of 9\*8cm in left adnexal region. MRI reported a large 13\*14cm well defined polypoidal heterogeneously enhancing mass arising from posterior wall of cervix mildly invading into posterior fornix and lower part of uterine myometrium. She received intravenous iron therapy and GnRH analogue before surgery as she was anaemic and planned for hysterectomy after controlling her blood sugar by insulin.

On laparotomy bladder was densely adhered to uterus, big cervical fibroid of about 15\*14\*8cm was arising from posterior cervical lip. Bilateral tubes and ovaries were normal. Removal of cervical fibroid done by Rutherford Morrison technique followed by hysterectomy

with left salpingo-oophorectomy.(Figure-2) She received one unit of blood during postoperative period. Her blood sugar was controlled on diet only and did not required insulin after third day of surgery. Histopathological report showed lipoleiomyoma which is a rare variety and responsible for variable consistency.



**Figure:2 Posterior wall cervical fibroid with uterus**

#### Discussion

Cervical leiomyomas are rare accounting for approximately 1-2% of all fibroids. Central cervical fibroid usually arise from supravaginal portion of cervix, surrounding the entire cervical canal and lying centrally in pelvis ,distorting the pelvic anatomy, presenting clinically with either lump abdomen or pressure symptoms of bladder and bowel. Pedunculated fibroids arise from endocervical canal and protrude through the cervix. Sessile cervical fibroids arise from cervical lips of vaginal portion and are rare [1].These type of fibroid presented with symptoms like mass coming out of vagina or infected polyp as presented in our case. Although preoperative diagnosis can be made by USG & MRI but final diagnosis is always made at laparotomy [3] On Laparotomy, a central cervical myoma; occupying the whole of pelvic cavity and small uterus sitting on the top of it gives appearance of 'the lantern on the top of St Paul's.

Alteration of pelvic anatomy in cases of central cervical myoma are upwards and outwards displacement of uterine vessels, pulled up bladder anteriorly and distorted normal anatomy of ureter; make all these structures prone to injury during hysterectomy as written in the literature and reported by various authors where cervical fibroid resembled an ovarian tumour and during surgery ureter was damaged and later ureteric anastomosis was done. (4) (5). Similarly Basnet et al reported intraoperative bladder injury which was repaired later (6). Intra-operative delineation of ureters and pre-operative ureteric stenting are essential precautions to prevent anticipated ureteric injuries as we did in our surgeries. Many Authors experienced massive blood loss intraoperatively leading to need for internal iliac artery ligation (7). We found average blood loss although our second case bled slightly more due to difficult dissection but did not required internal iliac ligation.

The principles of cervical fibroid surgery are enucleation of fibroid followed by hysterectomy to minimize injury to ureters and uterine vessels or one can also give pre-operative gonadotropin-releasing hormone (GnRH) analogues three months prior to facilitate surgery by reducing the size and vascularity of fibroids. The disadvantage of GnRH analogue is that they make plane of cleavage between the capsule of the tumour and the surrounding structures less distinct; thus making its removal difficult. In this way the fibroid is enucleated from the central part without injuring the ureter, bladder and uterine vessels. According to Rutherford Morrison's technique, Hemi-section of the uterus done in the relatively avascular mid-line zone and extending incision up to the tumour for enucleation is an alternative technique. We stucked to the principles and the results were optimal.

In our cases, injuries to organs were prevented by prophylactic DJ stenting along with uterine artery ligation at the origin, intracapsular removal of fibroid followed by hysterectomy in the first case and the implementation of Rutherford-Morrison technique for removal of myoma in second case as it was bit difficult due to presence of adhesion of previous two caesareans.

#### Conclusion

In first case patient did not had any urinary symptom which was unusual. Prophylactic ureteric stenting saved us from ureteric injuries as dissection was difficult in second case. Knowledge of the altered pelvic anatomy is utmost important in dealing with huge cervical fibroids to reduce intraoperative complications and an experienced surgeon is required for these surgeries.

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