



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

CERVICAL FIBROID AND CHALLENGES - CASE SERIES

KEY WORDS: Cervical fibroid , Hysterectomy , Leiomyoma

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ABSTRACT

Most common benign tumours of uterus in women of reproductive age group are fibroids (myomas or leiomyomas). They can be asymptomatic or present with varied symptoms . Fibroids have a complex aetiology that is not fully understood. The infrequent prevalence of fibroids before menarche and their regression after menopause imply that oestrogen and progesterone are necessary for their proliferation. Depending on the location they are classified as submucosal , intramural , subserosal , cervical and parasitic fibroids . Only 1-2% of leiomyomas in the reproductive age group are found in the cervix, and most of them are located in the supravaginal region. Here we present a case series of 4 cervical fibroids which had varied age of presentation , clinical features , and surgical challenges .

INTRODUCTION :

Leiomyomas are responsible for about 1/3rd of hospital admissions to Gynaecology Department . Recent research has shown that fibroids affect the endometrium globally. Fibroids are monoclonal tumors that originate from the myometrium. They present with varied symptoms like irregular and heavy menstrual bleeding (HMB) which can lead to severe anemia, dysmenorrhea, pelvic pressure and pain, urinary symptoms like frequency and retention , dyspareunia, infertility, preterm labor, and early and recurrent pregnancy losses.1 FIGO has classified leiomyomas based on their location as submucosal fibroids and other fibroids.2 Cervical fibroids are rare and huge cervical fibroids may push the uterus upwards or displace the cervix or expand it so much that it disturbs the pelvic anatomy . This case series include 4 cases of cervical fibroid admitted and treated at our institute . Each having a varied presentation and posing different challenge for the surgeon.3

CASE SERIES

CASE 1

A 48 years old nulligravida presented to our department with complain of severe pain in abdomen and acute retention of urine since morning . On examination uterus was 24 weeks size with a firm mass felt of approximately 18*10 cm . Patient was stabilized . Ultrasonography was suggestive of 18 * 20 * 18 cm fibroid mass in post wall of uterus or cervical origin . CT scan also suggestive of 18 * 10 * 18 cm fibroid in cervical region. Patient underwent DJ stenting pre operatively to prevent ureteric injury and was posted for hysterectomy Intraoperatively a giant central cervical fibroid was seen . The bladder was stretched upwards and uterine vessels displaced upwards & outwards. In this case hysterectomy approached in the similar pattern uptill uterine artery ligation . Then anterior vaginal wall was incised and the vaginal cavity opened. This was then followed by sacrouterine ligament ligation and specimen retrieval . This method of Retrograde hysterectomy helped us prevent ureter injury and also easy specimen retrieval . (Figure 1 and 2)



Figure 1 and 2 :Cervical fibroid with Lantern on Dome of St. Paul's Cathedral appearance

CASE 2 :-

A 47-year-old, P4L4 came with complaints of urinary retention for 3 days. On examination, the cervix was dilated and completely effaced (taken up) and a mass of size approximately 8 ×8 cm seen bulging like a fetal head . On USG, 15×12×7 cm size cervical fibroid was seen. Intraoperatively, there was a huge fibroid on the anterior cervix . Fibroid caused the lower uterine region to enlarge, imitating the development of the foetal head. Dissection of the uterovesical fold and downward shifting of the bladder was done. Bilateral ureters were traced . We tied off both uterine arteries. After making a transverse incision, the massive cervical fibroid was progressively removed using a myoma screw while applying countertraction to the nearby structures. (Figure 3)

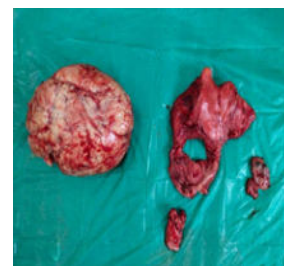


Figure 3 :Cervical fibroid with uterus

Case 3 :-

A 44 years old P1L1 presented with complain of irregular and heavy menstrual bleeding since last 1 year. On examination there was no mass palpable per abdomen and on per vaginal examination fullness felt in pouch of Douglas . On USG there was a 10 * 8 cm fibroidal mass arising from cervix. Laproscopic assisted vaginal hysterectomy was done with prior internal iliac artery ligation to reduce the blood loss. (Figure4)

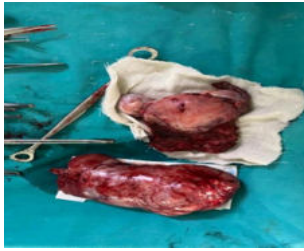


Figure 4 : cervical fibroid and uterus by laproscopic hysterectomy

Case 4:

A 43 years old P3L3 with prev 3 lscs presented with complaints of pain and distention of abdomen and incomplete voiding of urine for 3 months, menorrhagia for 2 years . (Figure 5) On examination abdomen was distended , uterine size corresponding to 28 weeks . Firm mass felt with restricted mobility Cervix was taken up and there was fullness in the pouch of douglas. On USG and CT scan, there was enlarged uterus with 20*22*18 cm heterogenous mass in POD extending upto uterine fundus.Prior to surgery,DJ stenting was done.Intraoperatively a large impacted fibroid was noted.Internal artery ligation was done prior to hysterectomy.

(Figure 5 and 6)

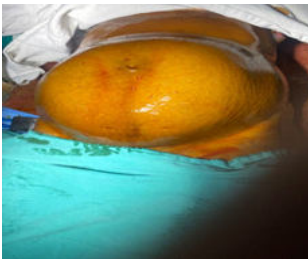


Figure 5: P3L3 with prev 3 LSCS with abdominal mass.



Figure 6 : Deeply impacted cervical fibroid

DISCUSSION :

Hysterectomy has been the primary modality of treatment for symptomatic cervical fibroids . It can be abdominal , vaginal , laproscopic guided or by robotics . Important concern regarding cervical fibroid is its ability to distort the anatomy thus posing challenge in its removal .

Cervical fibroids can be divided into four different categories: anterior, posterior, lateral, central. Depending on the type of cervical fibroid, different symptoms may be present.⁴ Anterior cervical fibroid presses against the bladder while the posterior fibroid pushes against the rectum , lateral cervical fibroid can enter the broad ligament . Most important is their relation to the ureter. The ureter and uterine artery will always be extracapsular, regardless of where they are in relation to the fibroid. By being aware of this reality, potentially hazardous procedures can be transformed into reasonably safe ones.⁵ Ultrasonography remains the main diagnostic modality but CT scan (CT) or magnetic resonance imaging (MRI) can provide a better estimation of the pelvic

topography as well as accurate measurements of the leiomyoma itself .⁶ Pathologies simulating cervical myoma include cystocele , chronic uterine inversion , and rarely vaginal tumors.⁷ Treatment of cervical fibroid should be individualised, taking into consideration important issues like fertility. The Surgeon's understanding of the altered anatomical relationship of the surrounding structures decrease the surgical challenges involved with the procedure.

To prevent intra-operative and post- operative problems, careful pre-operative examination is essential. Preoperative imaging and mapping of fibroid to see for size, number, location and its effect on surrounding structures prepares one for difficult steps of surgery. Interventions which can be done are use of GnRH analogues for reducing the size , pre operative DJ stenting of the ureters and correction of anaemia Intraoperatively , use of vasopressin injection , Bilateral uterine artery ligation , Internal iliac artery ligation and staying intracapsular during fibroid dissection helps to prevent injury to surrounding structures.

The Rutherford Morrison's hemisection of the uterus approach can be used for enucleation in cases with central cervical fibroid.⁸

CONCLUSION :-

Cervical fibroids are rare entities and location makes surgery challenging . They can distort the anatomy , lengthen the cervix and and if attain larger sizes, can also get impacted in the pelvis increasing the incidence of complications . Therefore , meticulous surgery by an expert remain the mainstay of successful management.

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