

CERVICAL FIBROID- A DIAGNOSTIC DILEMMA FOR GYNEACOLOGISTS

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ABSTRACT

Leiomyomas are the predominant pelvic tumours, with cervical uterine myomas being the least prevalent among uterine fibroids, occurring in 0.6% of all cases. Cervical myomas can be categorised based on their location as extra cervical (subserosal myoma) and intracervical. Cervical fibroids can be classified as anterior, posterior, lateral, or central based on their location. The surgical management of cervical leiomyomas presents greater challenges due to the possibility of intraoperative haemorrhage and potential complications resulting from the proximity and displacement of nearby organs. We report the case of a 40-year-old female with pelvic heaviness, urine retention, and polymenorrhea. Contrast-enhanced magnetic resonance imaging revealed a large cervical myoma. Myomectomy was performed, followed by total abdominal hysterectomy with bilateral salpingectomy. Injury to the ureter can be prevented with preoperative cystoscopy-guided bilateral ureteral stenting, intraoperative ureter tracing prior to clamp application, and dissection within the fibroid capsule. Keywords: marsupialization, hysterectomy, ureteric stenting, leiomyoma

INTRODUCTION

Leiomyomas are the predominant benign tumours of the uterus. The growth of leiomyoma is estrogen-dependent, flourishing throughout reproductive years and eventually regressing post-menopause. Cervical fibroids are uncommon, constituting 2% of all fibroids. [1] They originate from either the supravaginal or vaginal part of the cervix. They are categorised as anterior, posterior, central, and lateral based on their point of origin. Cervical fibroids may cause menstrual irregularities, urine retention, increased urinary frequency, constipation, dyspareunia, and postcoital bleeding, contingent upon their location. Large cervical fibroids are challenging to manage and require the expertise of a skilled surgeon for operative intervention. [2] Cervical fibroids may be mistaken for imprisoned procidentia or chronic uterine inversion [2, 3, 5]. Surgical complications may arise due to the proximity of pelvic organs, resulting in a heightened risk of bladder and bowel injuries, as well as increased intraoperative haemorrhage. Pretreatment with GnRH analogues or Ulipristal acetate may confer advantages. Myomectomy and hysterectomy are the preferred treatments for nearly all symptomatic cervical fibroids.

CASE HISTORY

This is the case of a 40 years old, female P2L2 with previous 2 full term normal vaginal delivery came to OBGY OPD with complains of heaviness in pelvic region and heavy menstrual bleeding. The menstrual bleeding lasted for 6-7 days, with change of 5-6 pads/day. The heaviness in the pelvic region was continuous in nature, with no postural or diurnal variation. This was associated with retention of urine, straining to pass the same with burning micturition. She was a housewife, married for 28 years, with her last childbirth 18

years back. Following the last childbirth, she underwent post-partum sterilization. The general physical examination and vitals was found to be well within normal limits, except for mild pallor. The patient was observed to be obese with a body mass index of 34.2 kg/m^2 . On Per abdominal examination, a large globular, firm mass with well-defined margins, non-tender with restricted mobility, corresponding to 28 weeks gravid uterus was palpable. The lower margin of the mass could not be made out. On per speculum examination, the cervix was observed to be bulky with inflamed mucosa. On bi-manual examination, a smooth, globular mass, up to 28 weeks in size of gravid uterus, firm in consistency with restricted mobility was felt. The uterus could not be felt separately and bilateral fornices free and nontender. To confirm the diagnosis, patient underwent an ultrasound, which revealed uterus was anteverted, with an endometrial thickness of 5.5 mm, a large heterogenous lesion of 88x85 mm noted most likely arising from anterior uterine wall in lower uterine region with mild internal vascularity on color doppler suggestive of subserosal fibroid. Following this evaluation, the differential diagnosis was delineated as a sub-serosal fibroid, broad ligament fibroid, and multiple uterine fibroids. To confirm this diagnosis, as there was bulky cervix observed on clinical evaluation, contrast MRI was done. Contrast enhanced-magnetic resonance showed a mass of approximately $8.0 \times 9.2 \times 5.6 \text{ cm}$ displacing the endocervix anteriorly, while the rest of the uterus was displaced posterosuperiorly. Large well-defined mass arising from the anterior lip of the cervix and distending the upper vagina, suggestive of giant cervical leiomyoma. After pre-anesthetic workup, the patient was taken up for total abdominal hysterectomy with bilateral ureteric stenting to relieve the ureteric compression. Intraoperatively, a giant fibroid of approximately $8 \times 10 \text{ cm}$ was noted occupying the pelvis and abdominal cavity, uterus was sitting on the fibroid, giving the appearance of a Lantern on saint paul's dome. Enucleation of fibroid with myoma screw was done after separating the bladder. Tracing of bilateral ureters was done and ensured to avoid injury. A total abdominal hysterectomy with bilateral salpingectomy was done.

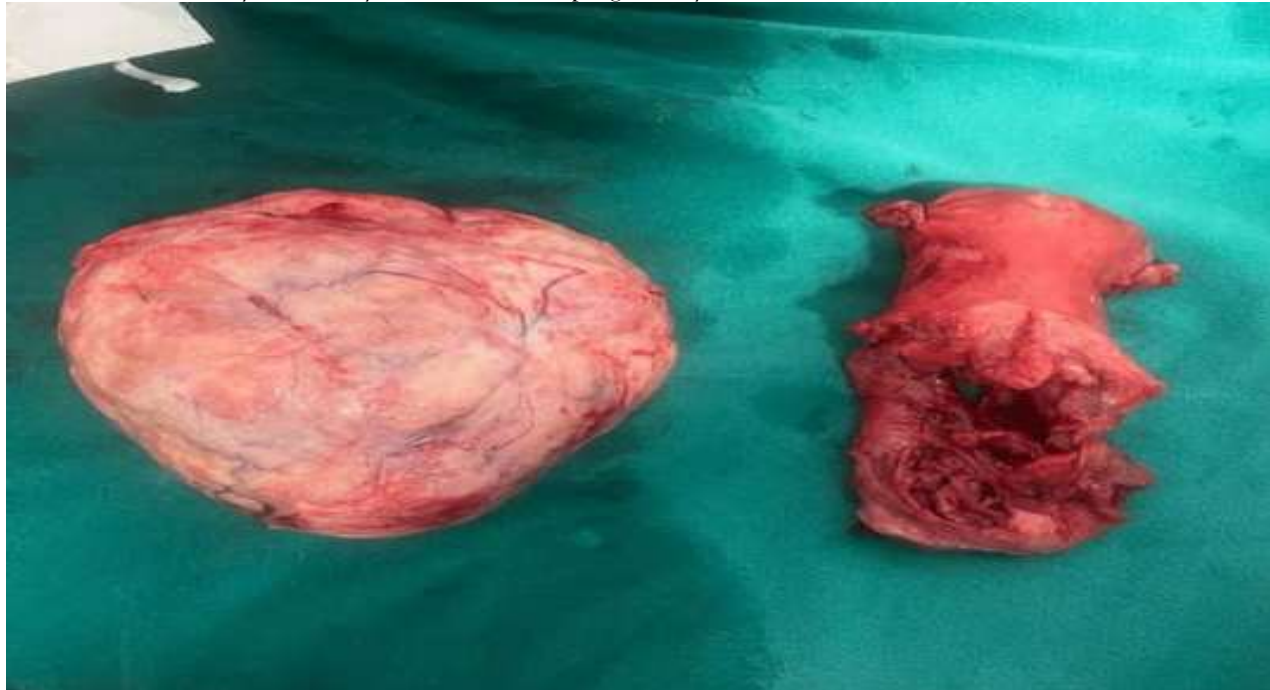


Figure 1:- total abdominal hysterectomy with bilateral salpingoophorectomy suggestive of a cervical fibroid

Intra-operatively, two units of blood were transfused. Her post-operative period was uneventful. Bilateral ureteric stents were removed on post-operative day-21. Patient has been on regular follow-up since.

DISCUSSION

Cervical fibroids are uncommon, and big cervical fibroids are much more uncommon. Ferrari et al. [6], in their systematic review of cervical leiomyomas comprising 214 cases, identified that the predominant presenting complaint was abnormal uterine bleeding (AUB) at 44%, followed by bulk-related symptoms at 20%, chronic pelvic or back pain at 14.6%, dysmenorrhea at 11%, and chronic urinary complaints at 11%. which resembled the conclusions of our case. Ultrasonography is an effective diagnostic tool for cervical fibroids. Ferrari et al. [6] documented a singular instance of misdiagnosis among 89 patients of cervical fibroid utilising ultrasonography as the imaging technique. The diagnosis in our case was established by combining ultrasonography with MRI. Two instances reported by Dahiya et al [7] exhibited a 15×10 cm irregular tumour resembling cervical cancer, accompanied by postmenopausal haemorrhage. Comparable instances of postmenopausal haemorrhage accompanied by a vaginal mass were documented. [8,9] Surgery, either hysterectomy or myomectomy, depending on the patient's age and reproductive desires, remains the cornerstone of treatment for cervical leiomyomas. Surgery may pose challenges due to the bladder's anterior position, the rectum's posterior location, and the bilateral ureters situated laterally to the cervix. Furthermore, the dimensions of the fibroid may result in a displacement of these structures, and there exists a persistent danger of intraoperative haemorrhage. Given these circumstances, a seasoned surgeon ought to conduct the operation. Myomectomy may be conducted by laparotomy, laparoscopy, robotic-assisted laparoscopy, or vaginally. Bleeding prevention can be achieved through the application of diluted vasopressin, bilateral uterine artery ligation, temporary closure of uterine artery flow with vascular clips, and the utilisation of an Internal Iliac artery balloon occlusion catheter (IIABOC) [6,10]. Evidence exists concerning the application of interventional radiology procedures, such as uterine artery embolisation (UAE), uterine fibroid embolisation (UFE), and hyper selective cervicovaginal artery embolisation. Ureteral damage continues to be a feared consequence [11,12]. Meticulous dissection and identification of the ureter during surgery are advised in high-risk situations. Pre-operative ureteral stenting, as executed in our instance, can facilitate the identification of ureters through palpation during laparotomy or visualisation during laparoscopy when employing illuminated or flashing stents [13].

CONCLUSION

Cervical fibroid is a rare and unusual finding on per speculum examination, and is often diagnosed as cervical cancer. A meticulous history taking, with clinical examination confirmed by imaging can help guide the surgeon to the ideal treatment modality.

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