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Case Report

Cervical fibroid: medical and surgical challenges faced

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ABSTRACT

Cervical fibroids are very rare accounting for 2% of all uterine fibroids. We report the case of a 48-year P4L4 with a large posterior wall cervical fibroid with a history of CVA and DVT of upper limb. Non-surgical interventional modalities like UAE were explored as a stop gap procedure. There was minimal reduction in size of mass after UAE but significant reduction in dysmenorrhoea and menorrhagia. Medical optimization of patient was achieved before definitive surgical intervention. D-J stenting of the ureters was done to prevent any injury.

Keywords: Cervical fibroid, DJ stenting, Hysterectomy, Uterine artery embolization

INTRODUCTION

The uterine fibroid is the most common benign solid tumor of the pelvis. However, cervical fibroid, which arises from the cervix rather than from the uterus itself, is a very rare entity, and its incidence is less than 1%.1 Classification of cervical fibroids depends upon where they are situated central, lateral, anterior, or posterior.² The patients commonly present with urinary retention, constipation, and menstrual abnormalities. Rarely, it may present as a palpable mass in the abdomen and be misdiagnosed as an ovarian tumor.3 There are many problems encountered during hysterectomy for cervical fibroid due to the uterine vessels-distortion of normal anatomy. The bladder being pulled up, the ureters are distorted. Therefore, more chances of injury to ureter, bladder and uterine vessels.^{4,5} Uterine artery embolization (UAE) is an percutaneous, image-guided technique which an interventional radiologist performs by inserting a catheter into the femoral artery and injecting embolic material (polyvinyl alcohol particles or gel foam) into the uterine arteries until the flow turns sluggish.⁶ It is a real challenge to anesthetize patients with history of Deep Vein Thrombosis especially when the patient is on anticoagulant therapy due to the risk of pulmonary thromboembolism.⁷

CASE REPORT

We present the case of a 48-year-old P4L4 tubectomies, married since 30 years who was referred from a medical college in April 2022 with the chief complaints of heavy menstrual bleeding since 2 years, distension of the abdomen since 1 year and pain in the abdomen since 6 months. Her past cycles were regular, 3-4 days bleeding in a 28-30 days cycle. She was using 2-3 pads per day. However, for 2 years she complained of dysmenorrhoea, was using 7-8 pads per day, and was passing clots. There was history of progressive distension of the abdomen since 1 year which was associated with pain that was gradual in onset, progressive, dull aching initially relieved on medication associated with heavy menstrual bleeding and severe dysmenorrhoea not associated with any urinary or bowel disturbances. There was no history of fever or weight loss. Patient was a known case of hypertension in the past 8 years on medications. The patient was on T amlodipine 5 mg OD, T Telmisartan 40 mg OD, Tb chlorthalidone 12.5 mg OD. Patient gave history of a cerebrovascular accident in 2014 followed by Deep vein thrombosis of left upper limb. History of 2 PCV transfusion in 2020 in view of anaemia. On examination General condition fair, BMI 37.8 kg (OBESE class 2).

There was no pallor or oedema. On palpation a mass of 22-24 weeks soft to firm in consistency, nontender, irregular surface with smooth margin, mobility restricted with mass occupying whole hypogastrium with lower limit not reachable, extending up to pelvis. There was no shifting dullness on percussion. On per speculum examination Cervix- taken up and flushed, Vagina healthy, Bleeding present, clots+. On Per vaginal examination-uterus size could not be assessed, firm mass of 22-24 weeks with restricted mobility felt, not separate from the uterus. Mass obliterating all fornices. Investigations were sent and found to be abnormal prothrombin time 12.6 INR 0.92, APTT 25 ratio-7.1 (raised), D dimer-4.37 (raised). CA125-86.76 (raised). MRI pelvis showed 11.5×10.7×13.7 cm, large well defined, lobulated, solid soft tissue lesion in pelvis not separately visualized from posterior lip of cervix. The lesion is extending into upper vagina with effacement of posterior and lateral fornices. The lesion is displacing the body of uterus superiorly and anteriorly. The lesion is abutting the sigmoid colon and abutting the urinary bladder. Suggestive of large posterior lip cervical fibroid.

Doppler of the upper limb showed -chronic thrombosis in left IJV, left subclavian vein, left brachial vein, left ulnar and left radial vein, left basilic vein and proximal left cephalic vein. Pre anaesthetic fitness for surgery was not given due to high risk of embolism during surgery and hence considering the co-morbidities decision to do uterine artery embolization was taken. Follow up size of mass after UAE 25/5/22- 14.6×7.8×10.2 cm, 20/7/22 -7.8×10.5×12.9 cm. There was significant reduction in menorrhagia and pain following uterine artery embolization The patient came for follow up in month of October 2022, with complaints of amenorrhea. She was advised USG TVS pelvis. 10/11/22-10×10.5×12.5 cm sized which showed minimal reduction, well defined lobulated heterogeneous predominantly hypoechoic lesion with hyperechoic areas arising from cervix, displacing ET anteriorly. Patient was tapered of anticoagulants and coagulation studies was within normal limits. A-V Doppler of upper limb showed resolution of thrombosis. Decision to do exploratory laparotomy with total abdominal hysterectomy and bilateral salphingooophorectomy was taken. Pre operative D-J stenting tried. RIGHT side stent introduced. Left sided stenting was not possible due to distortion of the anatomy of the ureters by the fibroid. MIDLINE Vertical incision was taken from 3 cm below umbilicus to pubic symphysis. Abdomen opened in layers. Lantern On Saint Paul's Cathedral appearance seen. Uterus sitting on the vagina. Ballooning of vagina seen. Proceeded with abdominal hysterectomy. Clamps applied to cornual structures. Clamp cut and ligated. Anterior peritoneum dissected. Bladder pushed down. Clamps applied to infundibulopelvic ligaments clamped cut and ligated. Vaginal vault opened while applying the uterine clamps and large central fibroid delivered by **MYOMA** SCREW extending the incision circumferentially. VAULT closed. Haemostasis was confirmed. Right D-J stent palpated. Abdomen closed in

layers. Post hysterectomy specimen sent for histopathological examination and diagnosis confirmed D-J stent removed and patient discharged from hospital with an uneventful stay.



Figure 1: D-J stent of the right ureter. Left ureter stenting not possible due to distorted anatomy.



Figure 2: Intraoperative finding. Myoma screw used to deliver the fibroid.

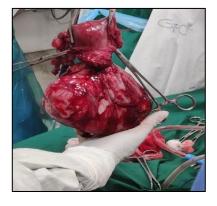


Figure 3: Post operative finding -lantern on dome of St. pauls cathedral.

DISCUSSION

Uterine leiomyoma is the most common indication of hysterectomy. Preoperative uterine embolization helps to reduce the blood flow in the uterus and subsequently reduces blood loss when operating the uterus during surgery reducing the need for intra-operative and post-

operative transfusions.9 There was not much reduction in size of mass after UAE, however patient had significant reduction in pain and menorrhagia. Atrophy of small, potential residual fibroids after a uterine artery embolization (UAE) is another result of long-term decreased blood supply. Tilva did preoperative uterine artery embolization (UAE) to prevent intraoperative blood loss, and Double-J (DJ) to avoid ureteric injury. This was followed by a total abdominal hysterectomy.9 Prior identification of the ureters with either retroperitoneal dissection or pre-procedure cryptoscopic ureteric stenting, as was done in our case, may be of help in selected cases of very large cervical fibroids with lateral projection.¹⁰ Deep vein thrombosis can be managed and even surgical intervention is possible. Proper monitoring of INR and APTT helps in performing surgery under anaesthesia thereby reducing morbidity and mortality.⁷

CONCLUSION

The relation to the ureter is important. The ureter and uterine artery are always be extracapsular, lateral and posterior. The best practices for preventing ureteric damage include preoperative stenting, intraoperative ureter delineation, and dissection inside the fibroid capsule. Exploratory laparotomy is the mainstay of treatment for massive fibroids, and due to their close relationship with the bowel, bladder, and ureters, injury to them is a major surgical obstacle. Medical optimization of the patient before surgical intervention should be done.

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