Unusual giant central cervical leiomyoma: a description of two cases

Ahmed Samy El-agwany, Manal Shafik Swelam

Abstract
Fibroids are the most common benign gynaecological tumour. Most of the fibroids are situated in the body of the uterus, but 1-2% of cases, are confined to cervix. We report two cases with huge central cervical fibroid with uterus sitting on the fibroid i.e. lantern on the St. Paul's. Both are treated by total hysterectomy. One of them was complicated with iatrogenic pelvic ureter transection that repaired intraoperative.

Key words: Cervical fibroid, ureter injury, hysterectomy

Introduction
Uterine fibroids are benign smooth muscle neoplasms that arise from the myometrium. They are falsely called fibroids instead of leiomyoma because of collagen contained in many of them creating a fibrous consistency. Their incidence is 20 to 25 percent, but as high as 80 percent in studies using histologic or sonographic examination [1]. Most leiomyomas are in the body of the uterus, but up to 1-2%, are confined to the cervix especially the supravaginal portion [2].

Case reports
Case 1
A 45 year old female, para 3 admitted to our hospital complaining of gradually developing abdominal swelling since years. The patient was HCV positive. On examination, her vitals were stable. Per abdomen examination was revealing uterine enlargement reaching 28 weeks of gestation with umbilicus shifted upwards. On per speculum examination, fully effaced cervix with deviation of the external os to the right side and upwards with bulging fibroid in lumen was noted. So, a provisional diagnosis of cervical fibroid was made. All routine investigations were normal. Ultrasound showed a huge cervical fibroid measuring 40 cm in dimension, otherwise was free. Surgery was planned. On opening the abdomen through lower midline incision, huge central cervical fibroid was seen, which was filling the whole the pelvic cavity limiting exteriorisation of the uterus through the incision and the myoma was so deep in the pelvis and so, total hysterectomy with bilateral salpingo-oophorectomy was performed as difficult enucleating the mass (Fig. 1).

As the left ureter was adherent to the mass and difficulty identified, it was completely transected during dissection, which was repaired. Bilateral internal iliac arteries ligation was done to secure haemostasis. Patient received 3 units of blood intraoperative and 2 units postoperative and her recovery was smooth. Sutures were removed after 10 days and the patient was discharged. Specimen was sent for histopathological examination that weighted 10 kg and histopathological report revealed cervical leiomyoma.

Case 2
A 48 year old women, was admitted to our hospital with history of gradually developing abdominal swelling, with irregular mensis. There was no urinary retention or constipation. She was Para 2. General, cardiovascular and respiratory examinations were normal. Abdominal examination showed enlarged uterus with restricted mobility nearly 24 weeks of gestation size. There was no ascites clinically. PV revealed a thin rim of cervix around the mass that was elongated and deviated upwards by the mass. Ultrasound suggested a normal sized uterine cavity with huge cervical fibroid about 25 cm in size. Exploratory laparotomy under GA though lower midline incision revealed a 5 kg single central cervical fibroid of size 25 cm, with a normal size uterus on top and bilateral ovaries. Total abdominal hysterectomy with bilateral salpingo-oopherectomy was done (Fig. 2) Histopathological report confirmed fibroid of cervical origin. Her recovery was smoothl. Sutures were removed after 10 days and patient was discharged.
Discussion

Uterine leiomyoma are the most common indication of hysterectomy. Isolated cervical fibromyoma with intact uterus is not frequent. Huge cervical fibroids are uncommon. They are classified as: anterior, posterior, lateral, central and multiple. The symptoms depend on the type. Anterior fibroid undermines the bladder while posterior compresses the rectum against sacrum. Lateral cervical fibroid, burrows out into the broad ligament and expands it. The relation to the ureter is important. The ureter and uterine are always be extracapsular, lateral and posterior [3]. This fact turns a dangerous procedure into a safe operation. Central fibroid expands the cervix equally in all directions. On opening the abdomen, a central cervical myoma is recognized because the pelvis is filled by a tumor, on the top of which is the uterus like ‘the lantern on the top of St Paul’s. The removal of cervical fibroid is by hysterectomy, but it is difficult, and may be an extremely formidable undertaking. Altered anatomical relations of the surrounding structures is important. The problems encountered during hysterectomy for cervical fibroid are: 1) the uterine vessels-distortion of normal anatomy; 2) bladder is pulled up; 3) ureter distortion. Therefore, more chances of injury to ureter, bladder and uterine vessels. The principal to be followed should be enucleation of the myoma followed by hysterectomy to minimize injury to ureter [3]. This could not be achieved in the first case as the mass was very deep and bloody. The patient was HCV positive. We want to limit excess blood loss to decrease infection of the medical personnel. For enucleation, the capsular incision may be transverse or vertical one. The advantage of the transverse incision is that it can be placed above the bladder reflection and so reducing the risk of bladder damage. The disadvantage is that it cuts through blood vessels, which results in severe haemorrhage. The vertical incision can be placed over a vascular area, usually midline and extended into the body of uterus if necessary to expose the upper limits of tumor. Thus, we can conclude that knowledge of the altered anatomical structures is important for doing hysterectomy for cervical fibroid. The enucleation being accomplished within the capsule, all danger of injuring such important structures as the ureter, rectum and bladder is avoided, whereas an attempt to perform total hysterectomy by the usual method will be fraught with the risk to those structures that increases with the large size and fixity of the tumour as occurred in our first case. Many ureters have been injured during the surgical treatment of cervical myomas. When the tumour is completely impacted in the pelvis so that there is no place for the hand to separate the tumour from its capsule Bonney employed his myomectomy screw. It is sometimes traumatic experience with a large fibroid, although
traction on the screw undoubtedly will reduce the haemorrhage. The principle of wedge resection can be used or hemihysterectomy till the capsule of the myoma [3-5].

As regards to injuries to the pelvic ureter, it is rare to partially resect the ureter; more commonly, it is completely resected. The management is to anastomose the ends of the ureter, having first made the ends spatulate. The ends will be sutured using 4.0 Vicryl over a ureteric stent. The commonest stent used is the ”pig-tail” Silastic stent. The upper end of the stent is inserted into the renal pelvis and the lower end into the bladder. Extraperitoneal drainage is needed. The operative area should be drained to monitor for leakage of urine during the first few days [1, 2].

Conclusion

These case reports were discussed to show the dangers of surgery in huge central fibroids, complications and difficulty in surgery.

Ethical approval

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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References


Ahmed S El-agwany
Department of Obstetrics and Gynecology
El-shatby Maternity University Hospital
Faculty of Medicine, Alexandria University
Alexandria, Egypt
e-mail: ahmedsamyagwany@gmail.com