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Case Report

Primary Parasitic Leiomyoma: A Case Report

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Abstract

Leiomyoma is one of the most common benign tumor of uterus. They are the most common tumour of the female pelvis and the diagnosis is usually straightforward. Sometimes they undergo various pathologic changes when they may pose diagnostic and management difficulties. Parasitic fibroid being one such tumor which presents rarely and is a challenge for its diagnosis and management.

Keywords: Primary parasitic leiomyoma, fibroid, uterine tumor, degenerative changes

Introduction

Uterine leiomyomas forms the most common type of benign tumor found in women in reproductive age roup and tumor of the female pelvis. [1] About 20% of all women have one or more leiomyomas present in the uterus at death. Diagnosis is usually straightforward, unlike when they undergo various kinds of pathologic changes they pose both diagnostic and management difficulties.

When a subserous fibroid becomes adherent to other structures like the omentum from which they obtain their blood supply, the uterine pedicle either disappears completely or becomes avascular. In such wandering or parasitic leiomyoma following which the diagnosis is not certain and are rarely reported.

Case report

A 41 year old lady presented with pain abdomen of 1 week duration. She was para two with two living children delivered vaginally around two decades ago. Other than laparoscopic sterilization, she did not give history of undergoing any surgeries in the past. She had had regular menstrual cycles. Her vitals were stable and her cardiovascular and respiratory system examination was unremarkable. On examination of the abdomen it appeared uniformly distended until the xiphisternum.

A vertical scar of undergoing laparoscopic tubal occlusion was present below the umbilicus. On Palpation a mass arising from the pelvis extending up to xiphisternum and occupying all quadrants of the abdomen was felt. The mass was non-mobile, non-tender, smooth surfaced and firm to cystic in consistency. The upper and lower border of the mass could not be felt but the lateral border could be felt which is suggestive of a pelvic tumor. The external genitalia appeared normal. The cervix appeared pulled up and the utero-cervical length was 4 inches. After taking a PAP smear bimanual examination showed restricted mobility of the mass. Uterus was not felt separately from the mass and bilateral fornicial fullness was present and non tender.

Haemoglobin level was 10.5 gms %, CA 125-145 U/ml, chest x-ray and urine analysis were normal. An abdomino-pelvic ultrasound scan revealed a large mixed echoic mass in the

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abdomen extending from epigastrium up to the pelvis, containing large cystic and solid components and with minimal free fluid in paracolic gutter. CECT abdomen and pelvis showed a pelvi abdominal mass measuring 30.0x15.4x26.0cms (CCxAPxTR) demonstrating solid and cystic components. Post contrast images demonstrated significant enhancement of the solid components. Uterus and ovaries were not separately seen from the mass. The lesion extended superiorly into the epigastrium up to the level of celiac artery origin abutting and displacing the bowel loops and abutting the anterior abdominal wall on the anterior and left lateral aspects. The lesion was noted abutting the left lower ureter posteriorly.

Trace free fluid was noted in peritoneum and presence of a fibroid uterus was confirmed.

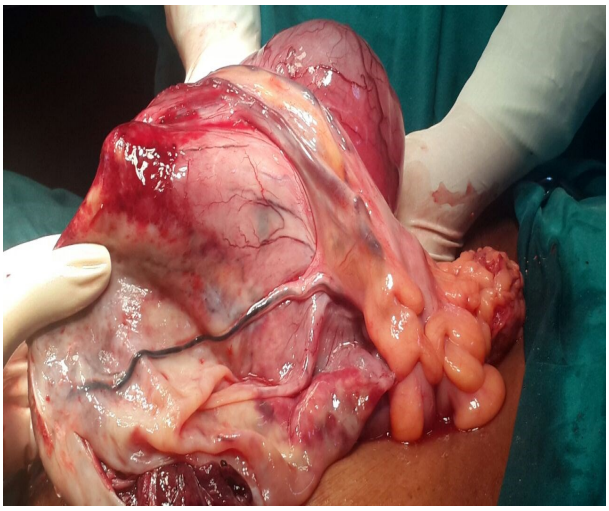

Fig 1. Parasitic uterine fibroid

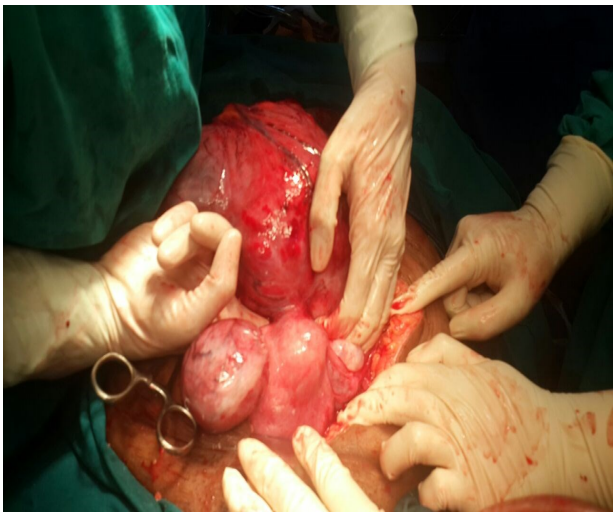

Fig 2. Parasitic uterine fibroid

In view of huge size of the mass pre operatively bilateral DJ Stenting was done. Laparotomy revealed a parasitic fibroid of 35 x 25cms partly cystic in the upper part and firm in the lower part, densely adherent to the omentum and bowel which was vascular. Cystic part of the tumor ruptured spontaneously and haemorrhagic fluid of about 400-500ml was drained. Posterior and superior surface of the tumor was adherent to the bowel getting its vascular supply. Leash of blood vessels were seen coursing over the posterior surface coming from the sigmoid colon over superior part of mass. Following the removal of the mass by dissection a subserosal fibroid with pedicle of size 6x 6cms was seen. Total abdominal hysterectomy with right salphingo-opherectomy was performed. The mass weighed 4 kg. Histopathological findings were consistant with leiomyoma. The patient had uneventful post operative period and was discharged on the 10th day. Colostomy closure was done 3months later.

Discussion

Leiomyoma are benign smooth muscle tumors clinically apparent in 20-25% of women of reproductive age. In most cases the diagnosis is straightforward but when they undergo pathological changes diagnostic and management difficulties occur. Our patient falls into the latter group. When a subserous leiomyoma outgrows its blood supply from the uterus it acquires its new blood supply from the structures adherent to it. Such leiomyomas referred to as "parasitic leiomyomas" survives by revascularization from adjacent structures.[6] Such structures include sigmoid colon (as seen in this case), omentum, common iliac artery and inferior mesenteric artery.[2] In most of the reported cases of parasitic leiomyoma the diagnosis were at surgery. As leiomyomas enlarge, they may outgrow their blood supply, resulting in various types of degenerations namely hyaline degeneration, calcification, cystic degeneration or red degeneration.[4] In general, hyaline degeneration is the most com-

mon (63%) form while the others occur less frequently, such as myxomatous changes (13%), calcification (8%), mucoid changes (6%), cystic degeneration (4%), red degeneration (3%) and fatty changes (3%).[5]

Parasitic myomas are rare occurence, which can prove to be a diagnostic delimma and may even present in the acute setting and sometimes a malignancy. Even though parasitic leiomyomata are rare they should be included in the differential diagnosis of pelvic or abdominal tumors in females.[3] Advances in retrival system have made laparoscopic myomectomy a feaseible option, irrespective of the size, site or number of myomas.[8] There are increasing reports of parasitic fibroids being recognized after laparoscopic myomectomy, especially in cases where tumors are morcellated for removal.

In a reported case series of parasitic myomas over a three year period 4 cases were detected in 423 women where electric morcellators were used for tumor removal. The overall prevalence of developing parasitic myoma was reported to be 0.9 and 1.2 % for those who had laparoscopic myomectomies.[9] There are also cases in the literature in which parasitic leiomyomas have been found attached to the bowel and anterior abdominal wall after laparoscopic myomectomy.[10,11]

Conclusion

Primary parasitic leiomyomas are rare occurrences. However, parasitic leiomyomas, which are iatrogenically caused, may be diagnosed more commonly in this laparoscopic era. Essence of this case with parasitic leiomyoma is the massive size and its rarity.

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