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Case Report

Emergency laparoscopic myomectomy in a rare case of hemoperitoneum from uterine leiomyoma

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ABSTRACT

The most common benign tumour in reproductive age group –uterine leiomyoma can rarely present with bleeding into the peritoneal cavity leading to hemodynamic instability. A 36-year parous woman presented with acute abdomen and hypovolemic shock. Pregnancy test reported to be negative. Emergency laparoscopy was done and detected to have a surface bleeder and emergency laparoscopic myomectomy done.

Keywords: Gynaecological emergencies, Hemoperitoneum, Laparoscopy, Emergency myomectomy

INTRODUCTION

Uterine leiomyomas are the most common benign smooth muscle tumours in reproductive age group women. Most commonly present with symptoms of abnormal uterine bleeding but rarely present in emergency with hemoperitoneum.[1]

The most common diagnosis of hemoperitoneum in reproductive age group women is ruptured ectopic pregnancy and a negative report of pregnancy leads to diagnostic dilemma. The next differential diagnosis considered in cases of hemodynamic instability are ruptured corpus luteal cyst or haemorrhagic cyst, rupture of ovarian tumours.[2,3] Here we present a case of acute abdomen due to a surface bleeder from the sub-serosal fibroid and how the case could be managed laparoscopically.

CASE REPORT

A 36 years Indian woman, BMI-28, para-1 live -1, a case of previous caesarean section who was not sterilised, had regular normal menstrual cycles, with no prior menstrual disturbances, presented on her day 2 of menstrual cycle with complaints of sudden onset abdominal pain, giddiness, one episode of fainting and 2 episodes of vomiting in 12 hours.

She consulted her physician and ultrasound taken which revealed hemoperitoneum with adnexal mass- possibility of ruptured ectopic. Blood investigations were sent and patient was referred to our centre for further management. In our centre, patient received, she was conscious, oriented, pale, tachycardia (110 bpm), stage 2 hypovolemic shock, blood pressure maintained with noradrenaline.

Pregnancy tests- beta hcG results came out to be negative, Hb- 7.9 g/dl, PCV 23.7%, other parameters- coagulation profile, liver and renal function tests were found to be normal. Ultrasound abdomen and pelvis done at our centre- revealed, moderate hemoperitoneum- free fluid in the hepatorenal pouch.

The uterus was enlarged and a posterior wall fibroid of 8×6.8 cm size noted. Endometrial thickness 7 mm, both the ovaries- normal, heteroechoic lesion 5.8×4.2 cm noted in left adnexa- possibility of hematoma, ruptured cyst.

Patient and attenders counselled and taken up for emergency laparoscopy and blood transfusion started.

Under general anaesthesia, pneumo-peritoneum created with veress in supraumbilical region, with 5 mm camera port findings noted, 750 g of blood clots splayed over the omentum. Around 2 l of hemoperitoneum noted extending up to hepatorenal pouch. Entire pelvis was obscured with blood.

Ancillary ports created. After adequate suctioning, a large type 6 subserous fibroid noted in the left posterolateral wall of the uterus in the fundus, surface was vascular with engorged vessels and a bleeder from the surface noted.

The bleeder was coagulated with bipolar initially but the vessel was thin and continued to bleed hence proceeded with laparoscopic myomectomy. An oblique incision of 7 cm made over the fibroid and intracapsular myomectomy done. Vasopressin was not used. Endometrial cavity not breached. Myoma bed closed in 2 layers with 1-0 V-lock sutures. Haemostasis achieved. Endo-bag morcellation was done. Bilateral fallopian tubes and ovaries, other abdominal organs appeared normal.

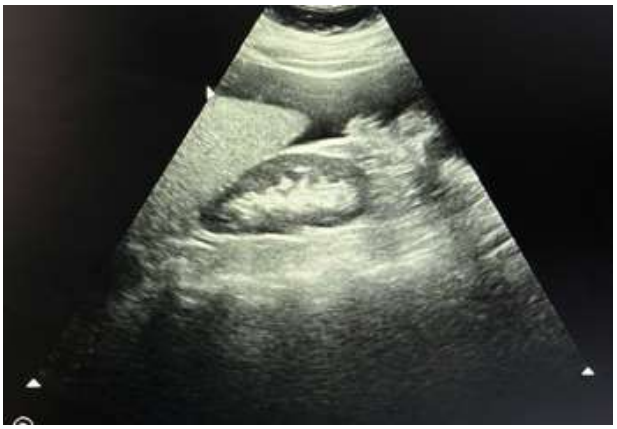

Figure 1: USG showing hemoperitoneum in the hepato-renal pouch.

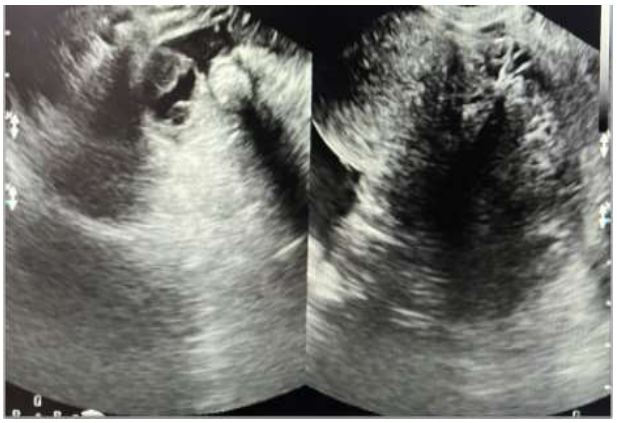

Figure 2: USG showing 8×6.8 cm posterior wall fibroid. Heteroechoic lesion of 5.8×4.2 cm in left adnexa.

Figure 3: Hemoperitoneum in the pelvis.

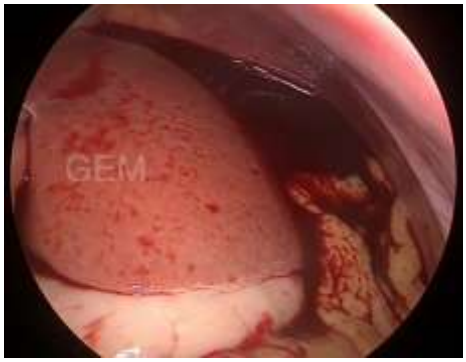

Figure 4: Hemoperitoneum in the pelvis under the diaphragm.

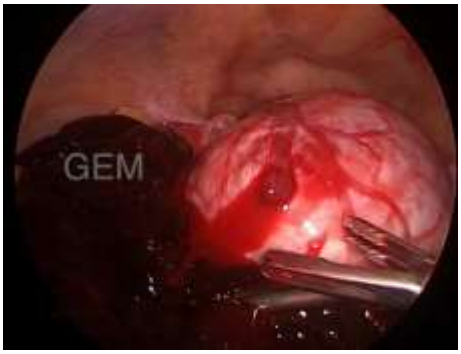

Figure 5: Surface venous bleeder from the posterior wall type 6 sub-serous leiomyoma.

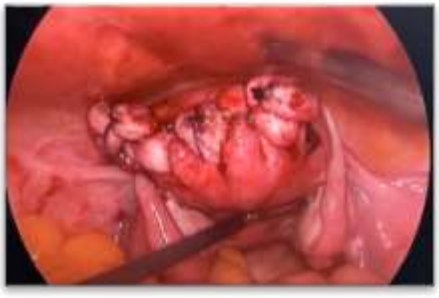

Figure 6: Myomectomy completed.

Drain placed and ports closed. Patient stable at the end of procedure. She had required two pints of packed RBC. Shock corrected. Patient recovered well, drain removed on Post-operative day 2 and patient was discharged on Post-operative day 3.

Post-operative review in OPD after 2 weeks- port sites healed well. The histopathological reports confirmed benign- leiomyoma.

DISCUSSION

Uterine leiomyomas are slow growing tumours and may be asymptomatic and detected incidentally or present with abnormal uterine bleeding, abdominal pain, urinary symptoms, infertility.[4] Acute abdomen with hemodynamic instability is a rare presentation. This rare complication can lead to mortality if not surgically intervened.[5,6] The causes of hemoperitoneum or acute abdomen related to leiomyoma include rupture of leiomyoma, rupture of subserosal vein or bleeding from subserosal artery or a lacerated leiomyoma or avulsed pedunculated leiomyoma or torsion of pedunculated leiomyoma.[7-10]

Spontaneous surface bleeding from the subserosal asymptomatic myoma is extremely rare but should be considered as a differential diagnosis in a reproductive age woman with a negative pregnancy test.[11,12] This spontaneous bleeding from subserosal fibroids have been reported and most commonly originating from vein as in our case.

Several theories have been presented for the spontaneous rupture of subserosal vein-overstretching of the superficial vessels, as leiomyoma grow, the feeding vessel may split between the uterine mass and cause rupture thus bleedingor pregnancy or immediate postpartum period or increased intra-abdominal pressure or trauma.[12,13] Some related predisposing factors according to studies- venous congestion during menstruation, posterior wall fibroids as they are in contact with sacrum, degenerative especially hydropicor sarcomatous changes.[14-16]

Most of the cases reported in literature were managed by laparotomy and here we present the laparoscopic management of emergency myomectomy.[7,14,17] In our case, a pre-operative differential diagnosis was sorted andadequate facility for fluid replacementensured and once in-detail counselling for laparoscopy was done, emergency laparoscopy with emergency laparoscopic myomectomy and evacuation of organised blood clots done. As she was laparoscopically managed without delay, patient recovery was rapid and satisfactory. In possible cases, emergency laparoscopic myomectomy is a better option.

CONCLUSION

Hemodynamic instability in a reproductive age woman with hemoperitoneum, chance of rupture of superficial bleeder from uterine leiomyoma to be considered. Laparoscopy can be considered and it can be the primary surgical technique in such cases.

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Ethical approval: Not required

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