



Hemoperitoneum associated with fibroid uterus

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Key words : hemoperitoneum, fibroid uterus

Introduction

Hemoperitoneum associated with uterine leiomyoma is very rare. In most cases the bleeding occurs as a result of rupture of a superficial vein¹ and occasionally due to trauma or torsion² or rupture of the fibroid³. Hemoperitoneum from subserous fibroid due to spontaneous avulsion is reported in only two cases⁴; the first case was reported by Shelly in 1931, and Cottalorda in 1935 reported another case in whom laparotomy was undertaken for suspected appendicitis and revealed hemoperitoneum with a gangrenous appendix to which the avulsed fibroid was adherent⁴. We report a case of a large subserous fibroid, which had undergone spontaneous avulsion resulting in hemoperitoneum.

Case report

A 45 year old multiparous woman was referred as a case of malignant ovarian tumor. She was in a state of profound shock with unrecordable pulse and blood pressure (BP). After 45 minutes of resuscitation, her pulse rose to 120/minute and BP to 90/50 mm Hg. There was a history of distension and pain in the abdomen for two days and vomiting for 24 hours. Her menstrual cycles were regular and there was no history of menorrhagia or dysmenorrhea. On general examination, she had mild pallor and no significant lymphadenopathy. Her respiratory and cardiovascular systems were normal except for tachycardia. Abdominal examination revealed distension of lower abdomen with tenderness and guarding. A firm tender mass of 24 weeks size with ill-defined margins was felt arising from the pelvis. On speculum examination, cervix and vagina were healthy. Vaginal examination revealed that the cervical movements were tender and the uterus could not be made

out separately from the abdominal mass whose movements were transmitted to the cervix. A provisional diagnosis of torsion of subserous fibroid or ovarian tumor was made. She was closely monitored. While her pulse and BP remained unchanged, abdominal distension and pallor gradually increased. She received 3L of colloids and crystalloids and 500 mL of blood during 3 hours time. A trans-abdominal sonography showed an echogenic mass of 17x14x10 cm in abdominopelvic region towards the right side. Uterus was mildly enlarged and the contour of the fundus could not be made out. The left ovary was normal and the right ovary could not be visualized. There was exudative type of free fluid, which on aspiration showed frank blood. Laparotomy was undertaken. It revealed more than 2L of hemoperitoneum and a bulky uterus with actively bleeding raw surface at the fundus. A large solid hemorrhagic mass of 20 x15 cm with evidence of detached surface was present in the peritoneal cavity with few flimsy omental adhesions. Left ovary was cystic and enlarged. Right ovary and both the tubes were normal. The mass was removed and total abdominal hysterectomy with left salpingo-oophorectomy done Two

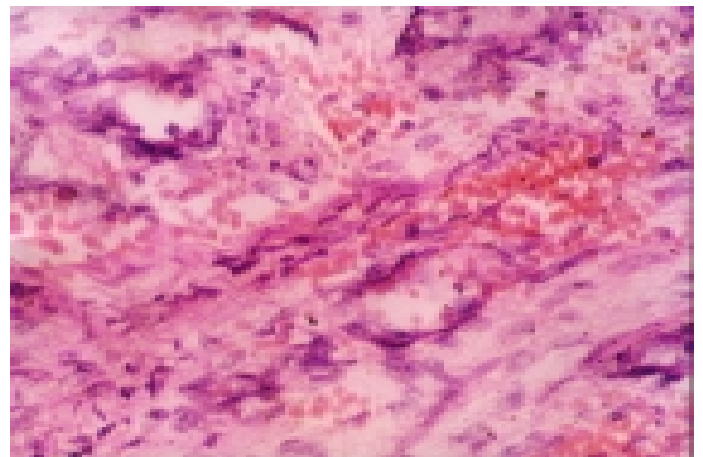


Figure 1. Microphotograph showing smooth muscle cells and areas of hemorrhage as evident by the presence of RBC especially in the right half of the picture.

Paper received on 27/05/2003 ; accepted on 14/06/2004

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units of blood and 500 mL of crystalloids and 500 mL of colloids were transfused under CVP monitoring during the intra-operative period. There were no postoperative complications and the patient was discharged on the 8th postoperative day after suture removal. The histopathological examination of the mass showed it to be a leiomyoma of the uterus (Figure 1).

Discussion

The common causes of acute abdomen in cases of fibroid uterus include torsion of subserous fibroid, red degeneration, torsion of uterus along with the fibroid, and sarcomatous degeneration. Sudden intraperitoneal hemorrhage in a case of fibroid uterus can also present as acute abdomen. This usually results from rupture of a dilated vein beneath the serosal surface of a subserous leiomyoma. A preoperative diagnosis of hemoperitoneum associated with fibroid is usually not made without prior knowledge of the tumor. The correct diagnosis was possible in 4 out of 53 cases reviewed¹. Most often, acute abdominal pain associated with shock necessitates laparotomy⁵. As the commonest cause of increase in size of the tumor is pregnancy, one may encounter this complication frequently during pregnancy. Three out of the 53 women died when surgical treatment for this complication was not attempted during pregnancy¹.

Avulsion of a fibroid during road traffic accident is reported in two cases³. The cause of avulsion was thought to be a contrecoup type of injury, the uterus and the fibroid moving at relatively different speeds producing a shearing stress in the pedicle rather than a direct injury³. The shock in these

cases is attributed to the hemoperitoneum resulting from avulsion of the subserous fibroid⁴. The avulsion in our case most probably occurred after torsion as the patient had symptoms of torsion unattended for two days, following which spontaneous avulsion must have resulted just when she reached our emergency department. The severe tenderness and rigidity of the abdomen at the time of hemorrhage often preclude definite detection of a fibroid on physical examination⁵. When large asymptomatic leiomyomas are diagnosed a recommendation for removal should be made even in young women as they are bound to grow till menopause with attendant risk of complications⁶. Large subserous fibroids can remain asymptomatic for a long time before causing life threatening complications like rupture of superficial vein, torsion, and avulsion. Hence they should be treated in the asymptomatic state itself.

Reference

1. Buttery BW. Spontaneous hemoperitoneum complicating fibromyoma. *Aust N Z J Obstet Gynaecol* 1972;12:210-3.
2. Sule AZ. Traumatic rupture of uterine fibroid: an uncommon cause of post-traumatic haemoperitoneum. *West Afr J Med* 2000;19:158-9.
3. Drutman J, Fruechte DM. Hemoperitoneum due to traumatic avulsion of a pedunculated uterine leiomyoma. *AJR Am J Roentgenol* 1992;158:1410.
4. Venables CW, Craft IL. Haemoperitoneum after traumatic avulsion of uterine fibroid. *Br Med J* 1967;16:723-4.
5. Saidi F, Constable JD, Ulfelder H. Massive intraperitoneal hemorrhage due to uterine fibroids. *Am J Obstet Gynecol* 1961;82:367-74.
6. Thompson JD, Rock JA. In: *TeLind's Operative Gynecology 8th edn*. Philadelphia. Lippincott - Raven Publications. 1996:741.