Uterine Leiomyoma presenting with Hemoperitoneum

Krishna Dahiya, Nymphaea Walecha

ABSTRACT

Bleeding from uterine leiomyoma is a rare cause of hemoperitoneum. Although extremely rare, spontaneous bleeding from uterine leiomyoma should be in the differential diagnosis when there is no history of trauma, pregnancy, or other findings. This case report highlights that spontaneous vascular rupture in a fibroid can cause acute cardiovascular collapse, and that this should be borne in mind in cases of acute abdomen, especially in the presence of an abdomino-pelvic mass. Because surgical intervention is the only definitive treatment, emergency physicians should be aware of this rare complication.

Keywords: Leiomyoma, Hemorrhage, Laparotomy.

How to cite this article: Dahiya K, Walecha N. Uterine Leiomyoma presenting with Hemoperitoneum. J South Asian Feder Obst Gynae 2013;5(1):33-34.

Source of support: Nil

Conflict of interest: None declared

INTRODUCTION

Intra-abdominal hemorrhage from uterine leiomyomas is very rare. In most cases, the bleeding occurs as a result of rupture of a superficial vein and occasionally due to trauma or torsion or rupture of the fibroid.¹⁻³ The condition can be severe and life threatening enough to cause anemia and hypotension.⁴ The diagnosis is often not evident until at the time of laparotomy.¹

CASE REPORT

A 48-year-old multiparous woman presented in outpatient department as a pelvic mass. She also had pain in abdomen which was mild and continuous in nature. The patient was very thin built and malnourished. Patient gave history of having the tumor since last 3 years, slow growing and increasing in size since last 5 months. She had no menstrual irregularity. On per abdomen examination, an irregular firm mass arising out of pelvis up to umbilicus was noticed. The mass was tender, had restricted mobility and was occupying most of the right iliac fossa and hypogastric region. There was no free fluid in the abdomen. External genitalia were normal. On per speculum examination, cervix and vagina were healthy. On bimanual examination, uterus was merged with the mass filling whole of pelvis and lower abdomen. All routine investigations were normal except her Hb was 7 gm. Percentage for which two units of packed cells were transfused preoperatively. Ultrasonography revealed multiple hypoechoic lesions of size varying from 2.5 to 5 cm, largest of size 5 × 6.5 cm. Bilateral ovaries were normal. Total abdominal hysterectomy was planned.

She had severe pain in abdomen on the day before surgery, her blood pressure was 80/60 mm Hg and PR was 120/minute.

On examination, abdomen was distended with extreme tenderness. Paracentesis revealed hemoperitoneum. Urgent laparotomy was performed under general anesthesia. Intraoperatively, uterus was enlarged to 24 weeks in size with three subserosal fibroids on fundal area and a hemoperitoneum of around 3 liters. A small subserosal fibroid on the left fundal area had an actively bleeding vessel on its dome (Fig. 1). Bilateral tubes and ovaries were normal. Total abdominal hysterectomy was done and hemoperitoneum was drained. She was transfused 3 units of blood and 3 liters of colloids and crystalloids during surgery, which lasted for 2 hours. Her postoperative period was uneventful and was discharged on the 7th postoperative day after suture removal. The histopathological examination confirmed a leiomyoma.

DISCUSSION

Uterine leiomyoma causing spontaneous hemoperitoneum is very rare condition with less than 100 cases to date.⁴ The first case was reported by Karl Von Rokitansky who wrote 'large or multiple fibroids exert a pressure on the uterus itself and hence an enlargement of the blood vessel which may be further stretched and occasionally be torn. In this manner, it has been noted and a tear of a subserosal vein in a fibroid led to hemorrhage into the peritoneal cavity'.

Deopuria et al identified a number of precipitating factors that can cause rupture of the superficial veins traversing the surface of the fibroid. These include venous congestion during pregnancy, menstruation, uterine manipulation, straining at stool lifting heavy weights and violent coitus.⁵ It has also been reported that posterior wall fibroids are at higher risk, as trauma from direct contact with the sacral promontory can result in rupture and hemoperitoneum.¹ Hemoperitoneum from subserosal fibroid due to spontaneous avulsion is reported in only two cases.⁶ In our case, it was probably due to uterine

Fig. 1: Peroperative photograph of fibroid with bleeding vessel on top

manipulation during examination. The bleeding is usually venous in origin and can be severe enough to cause anemia, hypotension and shock.^{4,7} In most cases as with our case, the bleeding occurred from torn veins coursing over the surface of subserosal fibroids.

The correct diagnosis is seldom made until at the time of laparotomy.⁶ In his review of 53 cases, Buttery et al reported that the correct diagnosis was made preoperatively in only four of 53 cases. He also reported that death resulted in three out of 53 cases reviewed.¹ In the present case also, the diagnosis was made only on day of surgery.

CONCLUSION

Although extremely rare, when there is no risk of trauma, pregnancy or other findings, spontaneous bleeding from uterine leiomyoma should be in the differential diagnosis. Emergent surgical intervention is recommended to establish the diagnosis and stop the hemorrhage.

REFERENCES

1. Buttery BW. Spontaneous hemoperitoneum complicating fibromyoma. *Aust NZJ Obstet Gynaecol* 1972;12:210-13.
2. Sule AZ. Traumatic rupture of uterine fibroid: An uncommon cause of post-traumatic hemoperitoneum. *West Afr J Med* 2000;19:158-59.

3. Drutman J, Fruechte DM. Hemoperitoneum due to traumatic avulsion of pedunculated uterine leiomyoma. *AJR AmJ Roentgenol* 1992;158:1410.
4. Danikas D, Theodorou SJ, Kotrotsios J, Sills Cordero PE. Hemoperitoneum from spontaneous bleeding of a uterine leiomyoma: A case report. *Am Surg* 1999;65:1180-82.
5. Depopuria RH. Hemoperitoneum secondary to rupture of coronary veins on a fibroid uterus (review). *J Obstet Gynaecol India* 1970;20:409-13.
6. Venables CW, Craft IL. Hemoperitoneum after traumatic avulsion of uterine fibroid. *Br Med J* 1967;16:723-24.
7. Horowitz E, Dekel A, Feldberg D, Rabinerson D. Massive hemoperitoneum due to rupture of an artery overlying a uterine leiomyoma: A case report. *Acta Obstetrica et Gynecologica Scandinavica* 2005;84(4):408-09.

ABOUT THE AUTHORS

Krishna Dahiya

Professor, Department of Obstetrics and Gynecology, Pt. BDS Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India

Correspondence Address: 74-R, Model Town, Rohtak-124001, Haryana India, Phone: 01262211888, e-mail: krishnadahiya@rediffmail.com

Nymphaea Walecha

Assistant Professor, Department of Obstetrics and Gynecology, Pt. BDS Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India