Torsion of the Postmenopausal Uterus: A Surgical Emergency

ANUPAMA HARI*, ADITHYA H†, SWETHA G‡, JIJIYA A#

ABSTRACT

Torsion of the nongravid uterus is rare, but can present as an acute abdominal emergency. As it causes irreversible ischemic damage to uterus and its adnexae, emergency laparotomy is mandatory as a diagnostic and therapeutic procedure. We report a case of torsion of fibroid uterus in a postmenopausal woman who presented with an acute abdomen requiring laparotomy.

Keywords: Torsion of uterus, uterine fibroids, acute abdominal emergency, laparotomy, postmenopausal

The clinical presentations as an acute abdomen in patients with uterine fibroids may include red degeneration, torsion of the subserous fibroid, torsion of the uterus along with fibroid and sarcomatous degeneration.[1] As uterine torsion leads to irreversible ischemic damage to uterus and its appendages, prompt diagnosis and treatment are needed.

In the present case, the woman presented with severe abdominal pain due to torsion of fibroid uterus along with its adnexae. Accurate diagnosis and subsequent emergency management saved the woman from this potentially fatal complication.

CASE REPORT

A 52-year-old tribal woman was admitted to our hospital on 26/10/2010 with severe pain abdomen for 2 days. She had two living children and the last child birth was 22 years ago. Both were normal vaginal deliveries. She reached menopause 3 years ago. On probing, she volunteered that there was mild abdominal heaviness of nearly 2-month duration before coming to the hospital.

*Professor
†Internee
‡Postgraduate Student
Dept. of Obstetrics and Gynecology
#Professor and HOD
Dept. of Pathology
Gandhi Medical College and Hospital, Hyderabad, Telangana
Address for correspondence
Dr Anupama Hari
C1-Vora Towers, Madura Nagar, Hyderabad - 500 038, Telangana
E-mail: hradhakrishna2020@rediffmail.com

On examination, her general condition was stable; pulse was 90/min, blood pressure (BP) was 130/80 mmHg. Abdomen examination revealed 18 weeks size midline tender mass; on bimanual examination, the same mass was felt and cervical movements were also tender. Ectocervix and vagina were found to be normal on speculum examination. Clinically, torsion of an ovarian mass was diagnosed. Computerized tomographic (CT) scan of abdomen and pelvis showed a large pelvic mass of 15.7 × 12.8 cm size, which was continuous with the uterus with multiple intralesional areas of degeneration and a preoperative diagnosis of fibroid uterus was made.

Doppler ultrasound revealed hypervascularity of the mass.

Serological investigations: Cancer antigen 125 (CA-125) - 27 µg/dL, triiodothyronine (T3) - 1.29 ng/mL, thyroxine (T4) - 9.4 µg/mL, thyroid-stimulating hormone (TSH) - 2.16 µIU/mL, hemoglobin - 9.8 g/dL, clotting time - 3′30″, bleeding time - 2′18″, blood group - AB +ve, fasting blood glucose - 80 mg/dL, blood urea - 26 mg/dL, serum creatinine - 0.9 mg/dL, ECG - within normal limits.

On 27/10/2010, laparotomy was done using subumbilical midline incision. Laparotomy findings: Multiple fundal subserous fibroids with cumulative measurement of 22 × 15 cm along with several seedling fibroids. Uterine torsion of 360° along with its adnexae was found at the level of isthmus (Fig. 1); both fallopian tubes and ovaries were highly congested and gangrenous. Posterior surface of the fibroids showed arborizing dilated vessels (Fig 2).

In view of the gangrenous appendages, total abdominal hysterectomy along with fibroids and

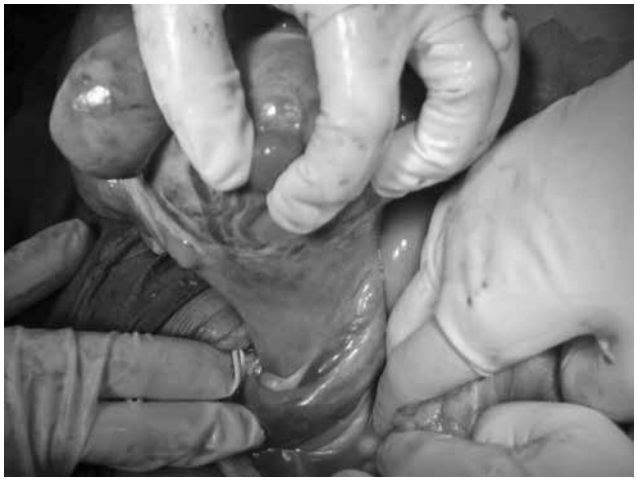


Figure 1. Torsion of 360° of uterus and its adnexae with multiple fundal fibroids.

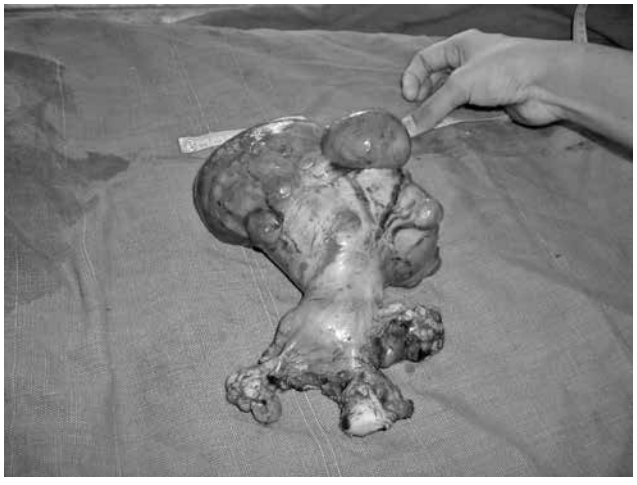


Figure 2. Dilated tortuous vessels over the fibroids and congestion of adnexae.

bilateral salpingo-oophorectomy was performed. Total weight of the specimen was 1.5 kg. Her postoperative period was good. Patient was started on higher antibiotics. One unit of blood was transfused during the postoperative period. The patient was discharged on 10th postoperative day in a stable condition.

Histopathology of specimen revealed subserous myomata with areas of hemorrhagic necrosis and congestion of uterine body and its adnexae (Fig. 3).

DISCUSSION

Uterine torsion is defined as rotation of uterus in its long axis by more than 45°.[2] Uterine torsion during pregnancy has been reported in more than 100 cases, but torsion of nongravid uterus is very rare.[3] Very few cases of torsion of uterus in postmenopausal women have been reported till date.[4] The torsion of uterus

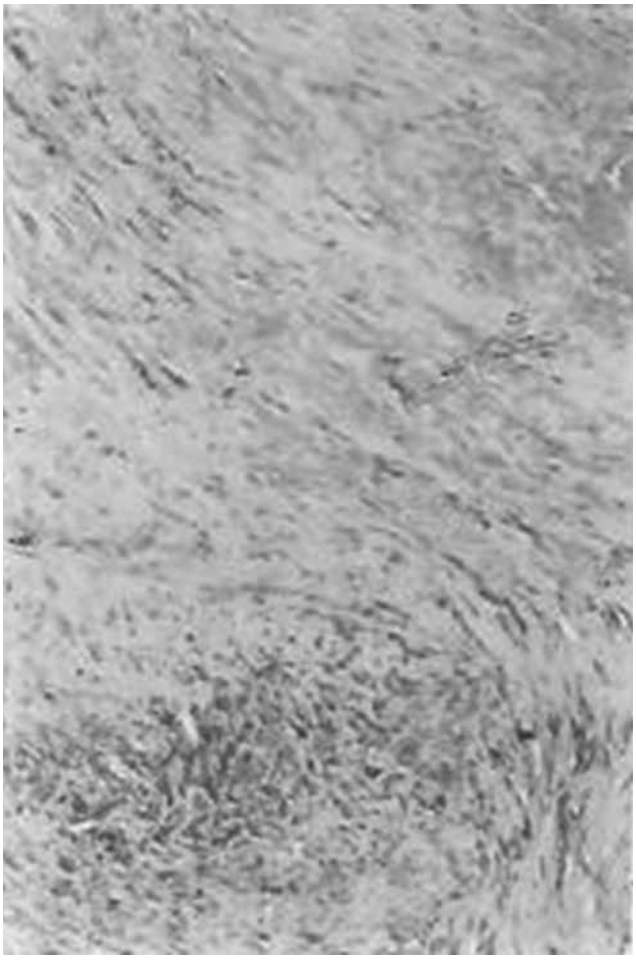


Figure 3. Areas of hemorrhagic necrosis in the H&E stained section within the myoma.

is usually at the level of supravaginal cervix, so that uterine vessels are obstructed leading to gangrenous uterus.[3,5] Nongravid uterus undergoes torsion only when the uterus is asymmetrical because of tumor or abnormal müllerian duct fusion.[5]

As uterine torsion causes vascular damage to uterus leading to rapid clinical deterioration, prompt diagnosis and urgent management are needed.[6] In the present case, the woman ignored the symptoms which were going on for 2 months, ultimately resulting in an emergency laparotomy.

Uterine torsion should be considered as a differential diagnosis in all 'acute abdomen' cases. The other causes of acute abdomen in fibroid uterus apart from torsion of fibroid are uncommon. Red degeneration and sarcomatous degeneration, though rare, are also to be considered.[1] Very rarely torsion of fibroids may lead to hemoperitoneum as a result of rupture of veins over the fibroid.[1] Cases of torsion of a puerperal uterus with fibroids have also been reported.[6]

Myomatous uterine torsion is difficult to diagnose preoperatively.[7] The clinical spectrum ranges from pain abdomen to distention to shock.[7] The differential diagnosis in a postmenopausal woman should include appendicitis, torsion of pelvic tumor and bowel obstruction.

Management of torsion of fibroid uterus includes prompt diagnosis and immediate laparotomy to save the life. In most of the cases, the operation involves removal of diseased uterus along with its appendages. But in young women who desire to retain fertility, myomectomy is to be considered after assessing the viability of uterus along with detorsion of the uterus.[4] The round ligaments and uterosacral ligaments should be plicated to prevent the recurrence of torsion if the uterus is to be conserved.[4]

In our case, the probable cause of uterine torsion by 360° might be the weight of the subserous fibroids acting on weak musculature of the postmenopausal uterus. Hence, the entire uterus along with fibroids was congested, necrosed and gangrenous. A total hysterectomy with bilateral salpingo-oophorectomy was performed.

Whenever large subserous fibroids are diagnosed, they should be surgically treated even though they are asymptomatic as they are prone to life-threatening complications like torsion of the uterus, avulsion of the fibroid and hemoperitoneum.[8]

REFERENCES

1. Dasari P, Maurya DK. Hemoperitoneum associated with fibroid uterus. J Obstet Gynecol India. 2005;55(6):553-4.
2. Luk SY, Leung JL, Cheung ML, So S, Fung SH, Cheng SC. Torsion of a nongravid myomatous uterus: radiological features and literature review. Hong Kong Med J. 2010;16(4):304-6.
3. Omurtag K, Session D, Brahma P, Matlack A, Roberts C. Horizontal uterine torsion in the setting of complete cervical and partial vaginal agenesis: a case report. Fertil Steril. 2009;91(5):1957.e13-5.
4. Daw E, Saleh N. Massive infarction of the uterus and appendages caused by torsion. Postgrad Med J. 1980;56(654):297-8.
5. Norman Jeff Coat. Textbook of Principles of Gynecology. 7th Edition, 2008. p. 305.
6. Chalmers JA. Torsion of the puerperal uterus associated with red degeneration of a fibromyoma. Br Med J. 1954;2(4880):138.
7. Nicholson WK, Coulson CC, McCoy MC, Semelka RC. Pelvic magnetic resonance imaging in the evaluation of uterine torsion. Obstet Gynecol. 1995;85(5 Pt 2):888-90.
8. John A Rock, W Jones III. Te Linde's Operative Gynecology. 8th Edition, 1996. p.741.

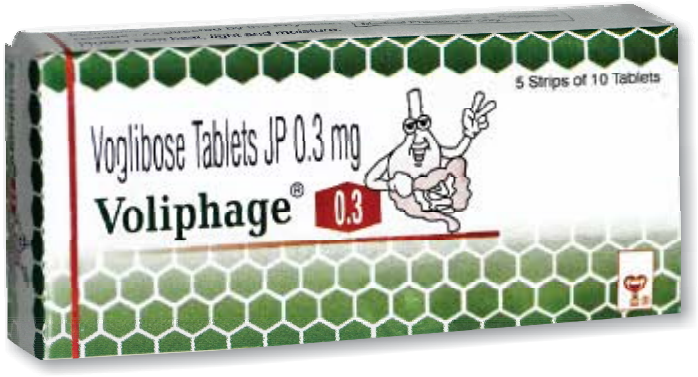
■■■■

When the Target is

℞ **Voliphage**™

0.2 mg / 0.3 mg

Voglibose 0.2 / 0.3 mg Tablets



Think PP stage... Think Voliphage

DIABÉTIX
A Division of
FRANCO-INDIAN
PHARMACEUTICALS PVT. LTD.

2018