

Torsion of non-gravid uterus with huge myoma

Abstract

A 40 years old single woman was presented with severe abdominal pain, progressive in nature (acute abdominal) during clinical examination a huge abdominal mass arising from pelvis was found with signs of abdominal rigidity and guarding. All other clinical features were within normal range. The abdominal ultrasound examination revealed abdominopelvic mass, irregular in shape with some degeneration of uterine myoma and adnexal infraction. The mass was not well defined and all matted together. Pre-operative diagnosis torsion of this mass with suspected origin of uterine myoma, adnexal or uterine torsion causing infarction of this mass. The operative findings were uterine torsion with both its adnexa. This torsion was severe enough to cause ischemia and gangrene to multiple parts of the mass. The final diagnosis was made during surgery and confirmed by histopathology examination. The diagnosis and proper action without delay save the patient from any complications and make the recovery smooth and quick.

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Introduction

Torsion of the nongravid uterus is a rare but potentially fatal acute abdominal condition. The non-specific clinical presentation of this condition makes pre-operative diagnosis difficult. We describe a patient with uterine torsion in whom the diagnosis was made using contrast-enhanced computed tomography with multiplanar reconstruction. Features of uterine torsion and its complications can be demonstrated by ultrasound and computed tomography, which have an important means of making a pre-operative diagnosis. Torsion of the nongravid uterus is quite rare.¹ It precipitated by uterine myoma and ovarian tumours. It can be a potentially fatal and presenting with acute abdominal condition. It was first reported in 1909. Uterine torsion may cause irreversible ischemic damage to the uterus, leading to rapid clinical deterioration,² so when this is suspicious immediate care is needed.

Case report

A 40 years old woman was admitted to Lamis clinic on 21/11/2015 with severe lower abdominal pain and big abdominal mass arising from pelvis equal to 36 weeks pregnancy. The pain started sudden, progressive in nature in the last 20 hours. She tried some pain killer without any benefit. This pain brought her to Lamis clinic from more than 400 km away from our clinic (Aljufraarea). The abdominal mass was not her complaint. She didn't give any attention to the mass, she was expecting the increase in abdominal size is due to weight increase. Her weight was 97 kgs. She had no history of vomiting, urinary symptoms, vaginal bleeding or any fever. She had no other medical consultation before us. When she arrived, she was in severe pain, BP: 10 mmHg, pulse: 80 b/min, Temp: 37.3 C°. Abdominal examination showed generalised guarding and some rigidity. Abdominal ultrasound showed a big mass, irregular in shape and hard with some soft areas. The severe pain she had was similar to ischaemic pain and it was progressive in nature this gave us the decision to take her for urgent laparotomy. Laboratory investigations were normal, including random blood sugar: 129 mg/dl, Blood urea: 35 mg/dl, viral screen were all negative and Hb was 10.3 g/dl, the other parameters were normal. The bedside examination and ultrasound findings in addition to clinical presentation gave the provisional diagnosis of torsion non-gravid myomatous uterus.

Operative / Finding

A big mass was arising from the right side of the uterus. This mass

was filling the pelvic and abdominal cavity measured about 45 cm in length and 28cm wide semisolid with some soft areas. The right ovary was fixed with the mass. It was small and black in colour, the left adnexa was also dark in colour and looked gangrenous, the uterus was torsion up to 170° at the cervix on the axial axis. The mass looked gangrenous. The weight of the mass was 7 kgs, Total abdominal hysterectomy with bilateral salpingo-oophorectomy in addition to partial omentectomy were performed. The total time of surgery was ninety minutes.

The portions were taken during surgery,

- i. Ligation of all big vessels (veins).
- ii. Gentle dissection of all adhesions.
- iii. Control all bleeding step by step.
- iv. Starting blood transfusion during surgery.
- v. Broad spectrum antibiotic and metronidazole was given during surgery. Abdomen closed in layers and two units blood were given during the operation. Her post-operative period went smooth. The patient was discharged home on day 4 of the operation.

The histopathology report

- i. Haemorrhagic infarction of big leiomyoma with red degeneration.
- ii. Totally necrotic ovarian tissue with massive oedema and haemorrhage. Moderate purulent and haemorrhagic. Uterine torsion 170° at the cervix was seen and the uterine wall was ischaemic with some parts of necrosis.
- iii. Moderate purulent and haemorrhagic peritonitis.
- iv. No evidence of malignancy is seen.
- v. The diagnosis: necrosis, red degeneration of myoma and gangrenous of both ovaries and tubes were seen.

Discussion

Uterine rotation on its long axis by more than 45 degrees leads to torsion.³ A large, heavy fibroid may disturb the stability of the uterus, which maintains by the broad ligament and the uterosacral ligament.⁴ This will lead to uterine torsion with a different degree. It appears that uterine axial torsion is usually caused by the presence of uterine pathologies like myoma or adjacent structural pathology. In our case,

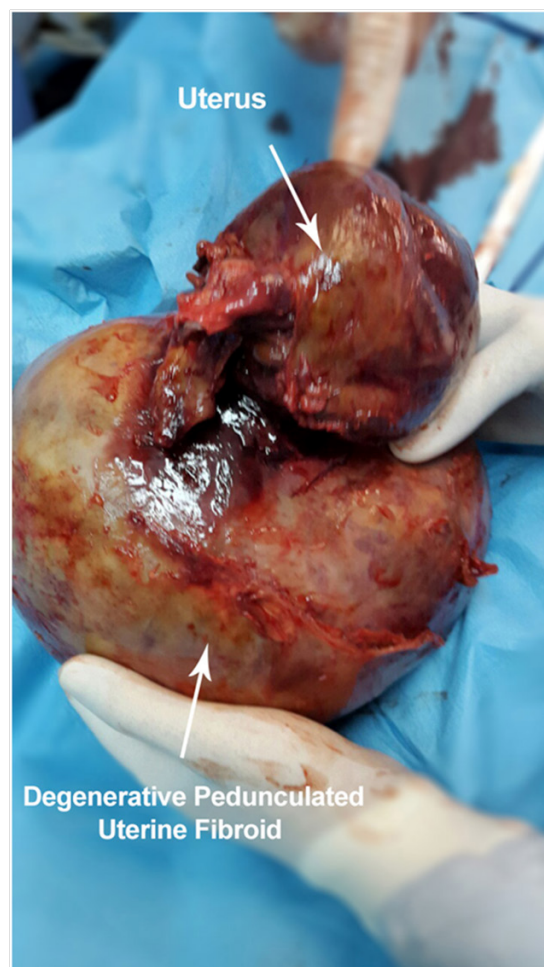
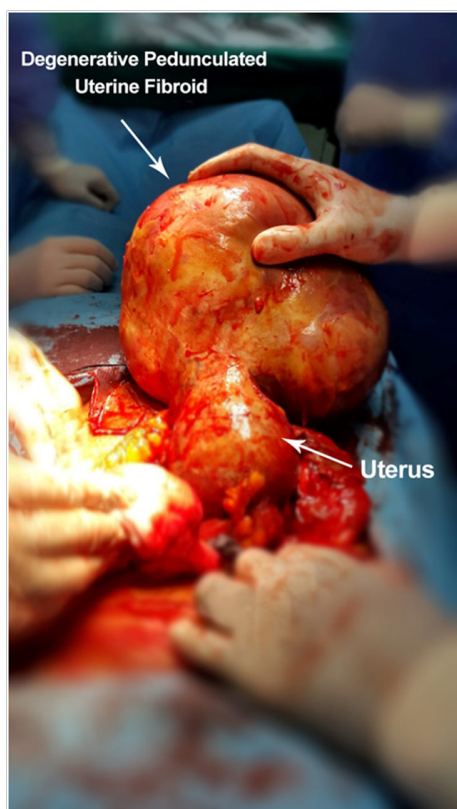
the cause of torsion was myoma on one side and the degree of torsion was 170°. This was enough to cause severe pain and necrosis in short time as in this case.

About two cases of the non-gravid uterus without myoma presented by torsion have been described before. Uterine torsion has been reported since 1861.⁴ Uterine torsion in a non-pregnant woman is difficult to diagnose pre-operatively,⁵ nowadays with good ultrasound and computed tomography provisional diagnosis can be expected like in our case. Severe pain in our case gave us the decision to do a laparotomy. The variation in clinical presentation of non-gravid uterine torsion from non-specific to acute abdominal pain and shock in most of the cases.⁶ In this patient, the presentation was acute abdomen and huge abdominal mass with no other symptoms. The differential diagnosis includes degenerative fibroid, adnexal torsion with a tumour, hysterectomy should be considered especially in presence of necrosis due to torsion and possibility of blood vessels thrombosis.

The uncomplicated selected cases a conservative surgical approach is possible.⁷ In this case, it is not possible to do conservative surgery due to big necrotic myoma of the mass including the whole uterus and ovaries, the necrosis (gangrene) was extended to both adnexa. Complete hysterectomy with removal of both adnexa was the decision. She was anaemic; blood transfusion was required during the operation, she was treated as acute abdomen.

Conclusion

Torsion of the non-gravid uterus is not common. It can be severe and fatal, especially when there is a wide area of necrosis and gangrenous tissue. The diagnosis should be in time and the action should be without any delay. Uterine torsion should be considered in any acute abdomen with pelvic mass such as myoma or adnexal mass, radical surgery like in this case is the treatment (Figure 1 & 2).



Acknowledgments

None.

Conflicts of interest

None.

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