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Case Report

Ovarian torsion in second trimester of pregnancy: a case report

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ABSTRACT

Torsion of the ovary is the total or partial rotation of the adnexa around its vascular axis or pedicle. Although the exact etiology is unknown, common predisposing factors include moderate size cyst, free mobility and long pedicle. Torsion of ovarian tumors occurred predominantly in the reproductive age group. The majority of the cases presented in pregnant (22.7%) than in non-pregnant (6.1%) women. Here, we report a case of ovarian torsion in second trimester of pregnancy. Ovarian torsion is an urgent gynecological surgery and can occur during pregnancy. Surgical techniques should be considered in the development of the adnexal torsion regardless of the gestational age.

Keywords: Ovarian torsion, Hemorrhage and necrosis, Torsion or infarction

INTRODUCTION

Torsion of the ovary is the total or partial rotation of the adnexa around its vascular axis or pedicle. Although the exact etiology is unknown, common predisposing factors include moderate size cyst, free mobility and long pedicle. Most common types of ovarian cysts are dermoid and serous cystadenomas. Complete torsion causes venous and lymphatic blockade leading to stasis and venous congestion, hemorrhage and necrosis. The cyst becomes tense and may rupture, leading to acute onset abdominal pain, a common presenting symptom in patients. There is 5- fold increased risk of ovarian torsion during pregnancy, with an incidence of 5 per 10,000 pregnancies.[1] Torsion of ovarian tumors occurred predominantly in the reproductive age group. The majority of the cases presented in pregnant (22.7%) than in non-pregnant (6.1%) women.[2] We report a case of ovarian torsion in second trimester of pregnancy.

CASE REPORT

A 24-year-old primigravida at 19 weeks of gestation, presented to the emergency department with chief complaints of sudden onset left lower quadrant pain and 5-6 episodes of vomiting. She described the pain as sharp and non-radiating type with no alleviating factors. She had a small cyst 2×2 cm on left ovary which was diagnosed at 1st trimester ultrasonography. But in 1st trimester she was not having any complaints.

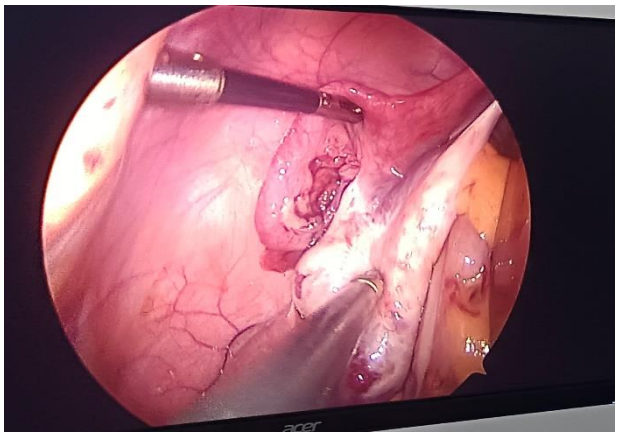

Figure 1: Ovarian cystectomy.

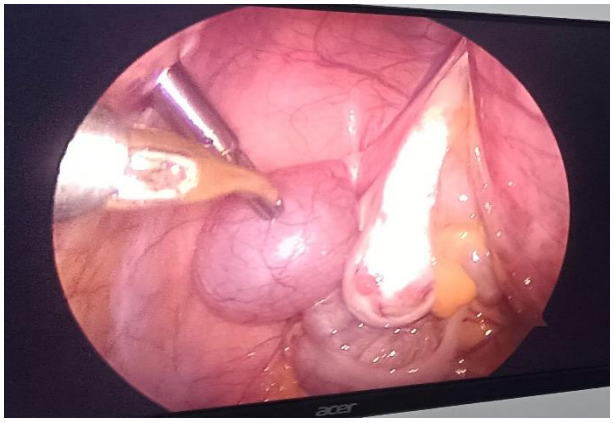

Figure 2: Ovarian torsion.

On examination, she was afebrile with vitals within normal limits. She had severe tenderness in left lower quadrant with guarding and no rebound tenderness. Uterus was noted to be 18-20 weeks in size with left adnexal fullness and tenderness on bimanual examination. Cervix was closed with no bleeding noted.

Pelvic ultrasound revealed a single live intrauterine gestation of approximately 19 weeks 2 days. A left ovarian cyst measuring 5.4×4.6×4.8 cm was noted, with no visible arterial or venous flow in the left ovary, suggestive of a left ovarian torsion.

After obtaining informed consent, the patient underwent laparoscopic left ovarian cystectomy under spinal anaesthesia. The left ovary was enlarged and twisted. Detorsion of the ovary was done and ovarian cystectomy was performed without any complications.

Post operative period was uneventful. Patient was put on tocolytics and vaginal progesterone tablets for one week. Patient discharged on post operative day 3.

Her histopathology report was consistent with serous cyst adenoma.

DISCUSSION

The incidence of adnexal torsion is unknown. In a 10-years study review ovarian torsion was 2.7 percent of emergency surgeries at a women's hospital and it was the fifth most common surgical emergency.[3]

Ovarian cysts less than 6 centimetres and appearing benign on ultrasound are generally treated conservatively as they may undergo spontaneous resolution. Cysts more than 10 cms should be removed due to increased risk of torsion, rupture or malignancy. Management of cysts between 5 to 10 cms is controversial.

If the cysts contain septae, nodules, papillary excresences or solid components the resection is recommended. Those with simple cystic appearance may be managed expectantly with serial ultrasound surveillance. However, they may require emergency laparotomy/ laparoscopy for rupture, torsion or infarction in as many as 50% cases.[4] Ovarian cysts during pregnancy may be managed conservatively with observation if diagnosed in the first trimester. The optimal time for surgical intervention during pregnancy is between 16 to 28 weeks of gestation. Immediate surgical intervention, irrespective of gestational age, may be warranted in cases of ovarian torsion, ruptured ovarian cysts or if there is a suspicion of malignancy.[4] Diagnosis of ovarian torsion in pregnancy can be made with clinical presentations in conjunction with ultrasound with color Doppler. Treatment options limited to surgery, either by laparoscopy approach or laparotomy. Pregnancy loss seems to be very rare and post operative tocolytics and progesterone supplementation are recommended when corpus luteum is removed prior to 7 to 9 weeks of gestation.[5-7]

Ovarian torsion is an urgent gynecological surgery and can occur during pregnancy. Surgical techniques should be considered in the development of the adnexal torsion regardless of the gestational age.

CONCLUSION

Ovarian torsion is relatively uncommon in the second trimester of pregnancy. Diagnosis can usually be made on the basis of the characteristic clinical presentation in conjunction with ultrasound evidence of a unilaterally enlarged adnexal mass. Treatment options are limited to surgery, either by laparoscopy or laparotomy, but the former becomes more difficult after second trimester.

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