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Case Report

Acute abdomen in pregnancy, not to forget twisted ovarian cyst: a case report

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ABSTRACT

Aim of the study was to present a case of acute abdomen in pregnancy with twisted ovarian cyst which is a rare entity. A primigravida with period of gestation 25 weeks presented to casualty with acute abdomen. Her USG Doppler revealed findings of ovarian mass of around 9 by 6 cm which underwent torsion. Patient was taken up for emergency laparatomy. Per operatively right sided tubo-ovarian mass-9×8×5 cm, dumbell shaped, fleshy, hemorrhagic and necrosed with one twist over the pedicle seen separate from the uterus. Left side tubes and ovaries seen normal, uterus-26-week size. Frozen section revealed benign pathology. Postoperatively patient was done well and delivered a healthy baby at term via cesarean section. High index of suspicion, regular antenatal follow up and analysis of related risk factors, early and prompt diagnosis and timely intervention in cases of ovarian torsion in pregnancy can change feto-maternal outcome. Meticulous planning and timely intervention under multidisciplinary care team at a tertiary care centre reduces feto-maternal morbidity and mortality.

Keywords: Acute abdomen in pregnancy, Ovarian torsion

INTRODUCTION

Acute abdominal pain in pregnancy can be due to obstetric as well as non-obstetric etiologies. Adnexal torsion is a rare cause of acute abdominal pain during pregnancy. The risk of adnexal torsion rises by 5-fold during pregnancy. Incidence is 5 per 10,000 pregnancies.[1] Ovarian torsion, also termed as adnexal torsion or tubo ovarian torsion, refers to rotation of the ovary and portion of fallopian tube supplying the vascular pedicle. The incidence of adnexal masses during pregnancy is estimated to be 0.2-2%, the vast majority of these masses are benign, with a 1-6% malignancy rate.[2] Most common is dermoid cyst (37-50%).[3] Other benign tumors seen in pregnancy are serous and mucinous cystadenoma. With the incorporation of ultrasound, adnexal masses are diagnosed more frequently than before. A total of 13.7% of all adnexal torsion episodes are found in pregnant women.[4] Adnexal torsion are more frequent in 1st and early 2nd trimester than in third trimester ovarian torsion in pregnancy has high maternal and fetal mortality if not immediately treated.[5,6] Torsion is more common in right rather than the left with an incidence of 3:2 because it is believed that sigmoid colon limits the mobility of left ovary.

CASE REPORT

A primigravida presented to our hospital at 25 weeks+2d of gestation in emergency room with chief complaints of acute pain in abdomen that began 10 hrs prior to presentation and was described as severe, stabbing in nature, non-radiating, and intermittent with no uterine contractions. On clinical examination her general condition was fair, pulse was 108 bpm blood pressure was 100/80 mmHg, systemic examination within normal limits. On per abdominal examination, uterus was corresponding to 26-week size, diffuse tenderness all over lower abdomen. Fetal movements were present, fetal heart sound was-148/min, regular, on per vaginal examination cervical OS was closed, cervical length 3 cm, posterior, no

show, no amniotic fluid leak was demonstrable. Her blood investigations were sent. Her routine investigations were within normal limits. CA125-22.7U/ml, LDH-139U/L, AFP-34.95 ng/ml. Ultrasound Doppler was done which revealed SLIUF of GA ~23 weeks 2 days, AFI adequate, anterior, grade II, well defined heterogeneous hypoechoic area/ lesion of size ~9×5.5 cm seen at right adnexa closely abutting myometrial wall, no evidence of internal vascularity seen on colour doppler. Rt ovary not separately visualised, findings s/o right tubo-ovarian lesion.

Pelvic MRI was done to confirm the Doppler findings which was also s/o right sided ovarian torsion (Figure 1). Symptomatic management for pain was done. Injectable progesterone and intravenous iso-xsuprine was given for uterine quiescence. Blood and blood products were arranged and emergency exploratory laparotomy was planned after discussing with patient and their relatives and taking high risk consent.

Multidisciplinary care team involving senior anesthetist, obstetricians was ensured and an emergency exploratory laprotomy for ovarian torsion was done. Paramedian vertical incision was given. Intraoperatively, right sided tubo-ovarian mass-9x8x5 cm, dumbell shaped, fleshy, hemorrhagic and necrosed with one twist over the pedicle seen separate from the uterus (Figure 2). Left side tubes and ovaries seen normal. Uterus-26-week size, pedicle clamped cut and transfixed, right sided oopherectomy done and sent for frozen section. Frozen section report revealed benign ovarian pathology with areas of hemorrhage and necrosis. Blood loss was average and patient stood procedure well. Post op uterine quiescence was maintained with isoxsuprine and progesterone, and pt was discharged on post operative day 8. Patient delivered healthy baby at term by cesarean route of delivery.

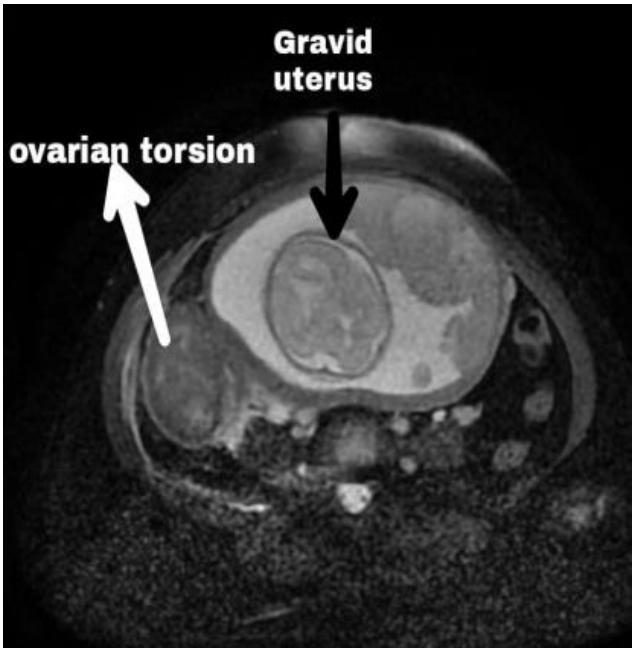

Figure 1: MRI image of gravid uterus along with ovarian torsion in sagital and axial view.

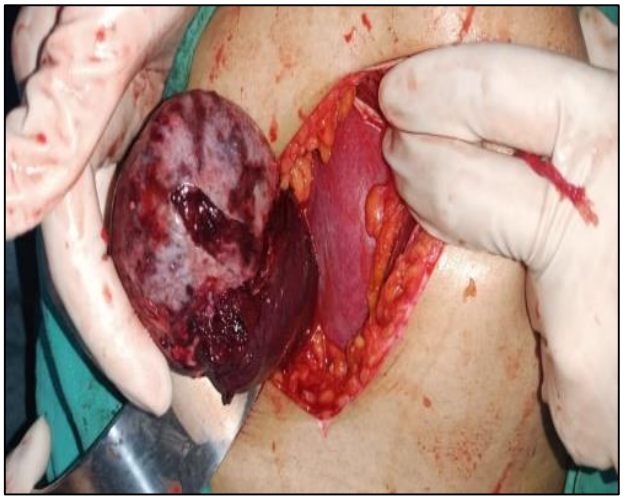

Figure 2: Right sided 9×5 cm haemorrhagic cyst present, twisted around its pedicle by 1 turn.

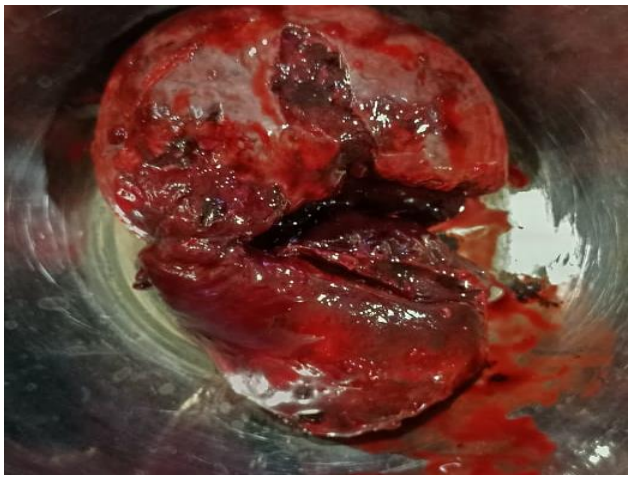

Figure 3: Gross specimen.

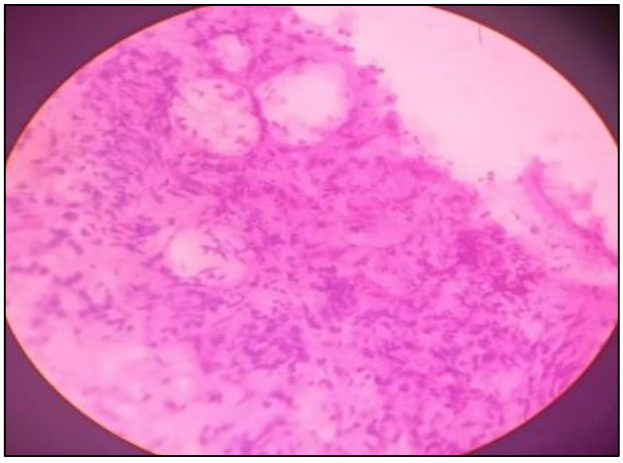

Figure 4: HPE report slide showing normal ovarian stroma.

Her final histopathology report revealed: sections studied from peripheral and central areas of ovarian mass show normal ovarian stroma with abundant necrosis and hemorrhage. No evidence of malignancy/dysplasia.

DISCUSSION

Ovarian torsion in pregnancy if not managed actively is associated with multiple adverse outcomes. Early diagnosis and treatment are essential to save the adnexa and decrease maternal and fetal morbidity. Adnexal torsion is difficult to diagnose in pregnancy, because its symptoms and signs are nonspecific and can be confusing when compared with other acute abdominal conditions. This case also demonstrates that MRI is valuable in diagnosis of adnexal torsion with equivocal sonographic findings.[7] If not treated timely it has shown bad outcome, 7 patients underwent abortion, 1 had IUFD in study of 74 patients.[8]

CONCLUSION

High index of suspicion, regular antenatal follow-up and analysis of related risk factors, early and prompt diagnosis and timely intervention in cases of ovarian torsion in pregnancy can change feto-maternal outcome. Meticulous planning and timely intervention under multidisciplinary care team at a tertiary care centre reduces feto-maternal morbidity and mortality.

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