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Case Report

Success story of acute abdomen in pregnancy-torsion ovary

Kalyani Saidhandapani*, Sadhana Karthikeyan

Department of Obstetrics and Gynaecology, Southern Railway Headquarters Hospital, Chennai, Tamil Nadu, India

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***Correspondence:**
Dr. Kalyani Saidhandapani,
E-mail: drkalyanis@yahoo.co.in

ABSTRACT

Torsion ovary is one of the acute emergencies in pregnancy with prevalence of 2.7-3% with high maternal and fetal mortality rates. Delay in diagnosis leads to hemorrhage, infarction and necrosis resulting in loss of ovary or fetal loss. Although 26% adnexal torsion can occur in apparently healthy adnexa, exact etiology remains unknown, predisposing factors include larger cyst size, free mobility and long pedicle. Acute onset of pelvic pain followed by nausea and vomiting is the most common presenting symptom. High levels of clinical suspicion along with ultrasound and doppler aids in diagnosis. We present a case of 18 weeks multipara with acute abdomen diagnosed as ovarian torsion, emergency laparotomy was done and salphingo-oophorectomy was proceeded without disturbing gravid uterus. Pregnancy continued and an alive term baby delivered by normal vaginal delivery. Once torsion ovary is suspected, surgical management remains the treatment of choice.

Keywords: Salphingo-oophorectomy, Cystectomy, Ultrasound doppler, Rokitansky nodules

INTRODUCTION

Ovarian torsion is one of the acute emergencies in pregnancy associated with high fetal mortality and an estimated prevalence of about 2.7-3%.[1] The majority of adnexal masses are discovered incidentally during prenatal ultrasound performed for obstetric indications.[2] These account for about 30% of masses in pregnancy and usually regress spontaneously during the first of early second trimester of gestation.[3] Torsion occludes blood supply and lymphatic drainage of ovaries thereby leading to congestion, hemorrhage and necrosis Diagnosis of ovarian torsion in pregnancy is challenging and based on history and clinical examination. Surgical diagnosis (laparotomy/laparoscopy) remains the treatment of choice.

CASE REPORT

A 28-year-old multigravida of 18 weeks' gestation presented to our OPD with complaints of abdominal pain more in right iliac region evolving for past 2 hours. It was continuous type of pain not relieved by analgesics. No h/o vomiting/fever/bleeding/leaking pv/dysuria. It was a spontaneous conception and dating scan done in nearby clinic 2 months ago revealed a viable 8 weeks' gestation with an adnexal cyst of 5×4.4 cm in right adnexa with no abnormal vascularity.

On examination, patient was afebrile with tachycardia, abdominal examination revealed gravid uterus of 18 weeks' size. Tenderness was present in right iliac fossa. P/s was done –os closed, no bleeding/spotting pv. No cervical motion tenderness. Appendicitis ruled out by imaging. Ultrasound with doppler done revealed a viable gestation of 18 weeks' size with enlarged right ovary of size 11.7×11.1×9.4 cm with hyoperechoic stroma and cyst of 6.7×6.1 cm in right adnexa with internal linear trans-hyperechoic foci suggestive of Rokitansky nodules with no E/O vascularity.

With ovarian torsion as provisional diagnosis, patient was counselled about the risk of abortion, hemorrhage, need for oophorectomy and emergency laparotomy was proceeded. Under spinal anaesthesia, abdomen opened through

Maylard's incision and bluish black hemorrhagic cyst of 16×15 cm which was torted thrice around its axis in the inguino-pelvic ligament forming the tubo ovarian complex was found.

Figure 1: Ultrasonography findings.

Figure 2: Intra-operative findings.

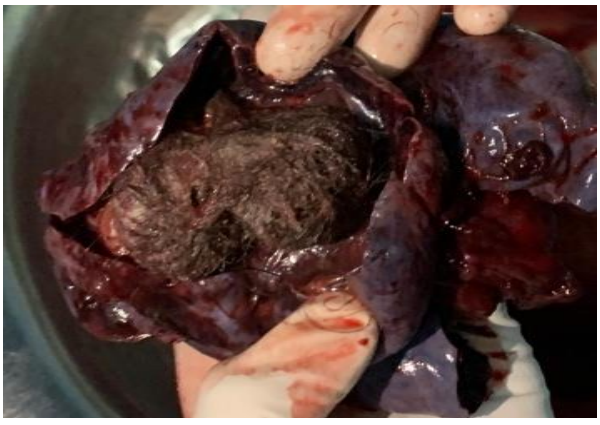

Figure 3: Cut section of adnexal cyst.

Hemorrhagic peritoneal ascites was present. Ascitic fluid was sent for cytology. Entire mass could not be delivered out because of gravid uterus. Hence, controlled aspiration of contents done without peritoneal spillage. Ovarian complex was detorted and checked. No return of colour or decrease in edema noted after 15 mins. Hence, right salphingo-oophorectomy was proceeded without handling gravid uterus. Procedure was uneventful. Immediate post op-viability of fetus confirmed by ultasonography. Post op antenatal care was given with additional isoxsuprine for 2 weeks and weekly progesterone injection till 34 weeks of gestation. HPE reports were suggestive of mature cystic teratoma and mucinous cystadenoma-collision tumour. Peritoneal fluid did not contain malignant cells. Routine antenatal care was continued and an alive baby-2.9 kg was delivered by normal vaginal delivery at 39 weeks of gestation.

DISCUSSION

Ovarian torsion is the complete or partial rotation of adnexa along its axis. The most common symptom is acute pain with nausea, vomiting. Ovarian torsion is more common in right than left with incidence of 3:2 is due to the sigmoid colon which limits the mobility of left ovary.[4,5] The most common ovarian tumours in pregnancy include teratoma, para-ovarian cyst, serous cystadenoma, corpus luteal cyst. 9-26% torsions occur in apparently healthy adnexa and therefore show no initial abnormality on ultrasound.[6] Diagnosis is based on clinical history and USG.

Based on grey-scale, adnexal torsion can be classified as: class 1- coiling with arterial and venous ovarian blood flow- conservative approach; class 2- coiling with arterial ovarian flow but no venous flow-surgical intervention required; and class 3- true strangulation-no ovarian blood flow-urgent surgical intervention required.[7]

Complications of ovarian cyst include-torsion, hemorrhage, rupture, infection and malignant transformation. Differential diagnosis includes appendicitis, ureteral or renal colic, cholecystitis and bowel obstruction.

Mangement of ovarian cyst is controversial. Surgical intervension may cause risks to the mother and her fetus, while observation without intervension will lead to unfavorable complications, such as ovarian torsion or the development of tumor.[8] However, torsion cyst presenting as acute abdomen warants surgical exploration. With advancing gestation, laparoscopy poses more risk than laparotomy. Initially salphingo-oophorectomy was done for adnexal torsion, however recent studies report simple cystectomy with detorsion of adnexa as more effective management. Detorsion retores blood supply to ovary thereby preventing the need for oophorectomy. In our case, ovarian tissue was necrosed, no colour change despite detorsion hence unilateral salphingo-oophorectomy was done. The ideal time for surgical resection is during second trimester between 16-28 weeks. Immediate intervention irrespective of gestational age is done in case of torsion/malignancy.

CONCLUSION

Torsion ovary in pregnancy is increasing in frequency due to the growing prevalence of ovarian stimulation. High clinical suspicion with early surgical management has favorable maternal and fetal outcomes. Surgical management is the treatment of choice for torsion ovary irrespective of gestational age. It is important to look for adnexal lesion during dating scan for effective management of the same and to prevent acute emergencies like torsion ovary.

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