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Case Report

Massive hydrosalpinx with torsion in second trimester of pregnancy: a case report

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ABSTRACT

Acute abdominal pain in pregnancy can be due to obstetrical (preterm labour), gastrointestinal, urinary causes etc. Pregnancy with large adnexal masses are rare presentations. This is a case report about a woman presenting to emergency with 16 weeks and 5 days of gestation with acute pain abdomen. Diagnosis of coexisting huge adnexal mass was made with ultrasound. No response to conservative therapy forced us to do laparotomy which showed huge hydrosalpinx with 4 twists around its pedicle. This case report emphasizes the need to keep hydrosalpinx with torsion in a differential diagnosis for acute pain abdomen in second or third trimester, especially if pain is not relieved on conservative management.

Keywords: Fallopian tube torsion, Hydrosalpinx, Pregnancy, Laparotomy

INTRODUCTION

In women of reproductive age isolated fallopian tubal torsion is rare, and it is even rarer during pregnancy.[1] Acute abdomen in pregnancy is a condition that is caused by various disorders from ectopic pregnancy to gastrointestinal disorders like appendicitis, urinary disorders etc. Its incidence is around 1 in 500-650 pregnancies.[2,3] The management depends on the aetiology, usually the condition is managed conservatively.

Hydrosalpinx is a condition caused by obstruction of the fallopian tube, causing in fluid accumulation in it. Usually, it is asymptomatic but it can present as abdominal or pelvic mass and pain.[3] We report a rare case of acute abdomen in the second trimester of pregnancy which was diagnosed on radiologic imaging as adnexal mass, further that was surgically managed.

CASE REPORT

A 28 years old woman G2P1L1A0 with 16 weeks 5 days pregnancy, presented to emergency with severe abdominal pain since last1 day in left lower quadrant associated with 10-12 episodes of vomiting and weakness. She had one normal vaginal delivery during last pregnancy with no significant past medical/ surgical history. She was unbooked and uninvestigated, with no previous ultrasound report. There was no history of such acute abdominal pain in past even prior to her getting pregnant this time.

On general examination, the patient was conscious, oriented to time, place and person, afebrile with tachycardia. No pallor/ jaundice/icterus/clubbing/ cyanosis/ peripheral lymphadenopathy. On per abdominal examination, uterus was of 16 weeks size and relaxed. A well-defined tense cystic mass of 20 weeks size on left lower abdomen could be palpated with guarding and rigidity in left iliac region. This left sided mass was separate from gravid uterus on palpation. On per speculum (P/S) examination, cervical os was closed, no bleeding or abnormal discharge was seen, cervix and vagina appeared healthy. Per vaginal (P/V) examination was not performed. She was conservatively managed with intravenous fluids, analgesics and antibiotics. Her routine biochemical investigation and complete blood count (CBC) was found

within normal limits except for borderline raised TLC. Her viral markers were negative. On ultrasonography (USG), a cystic mass 12×12 cm was detected in left adnexal region with ovary not visualised separately. There was single live intrauterine foetus of 16 weeks with normal cardiac activity, placenta anterior and liquor adequate. Thus, a presumptive diagnosis of left sided ovarian cyst with 16 weeks pregnancy was made since there was no past record suggesting pre-existing adnexal mass/ cyst. Even after 24 hours of conservative management, her pain didn't improve. Hence, the patient was taken up for exploratory laparotomy.

Per operation, a 16 weeks size gravid uterus was detected with a left sided large hydrosalpinx (approx. 12×10 cm size) twisted along with pedicle 4 turns along the axis. Left ovary had few small hemorrhagic cysts, rest of the structures were apparently healthy. Hydrosalpinx was detorted and removed. The patient recovered well in the post operative period and discharged on day 5 with healthy pregnancy on progesterone support. Histopathology report for the specimen showed serous cystadenoma.

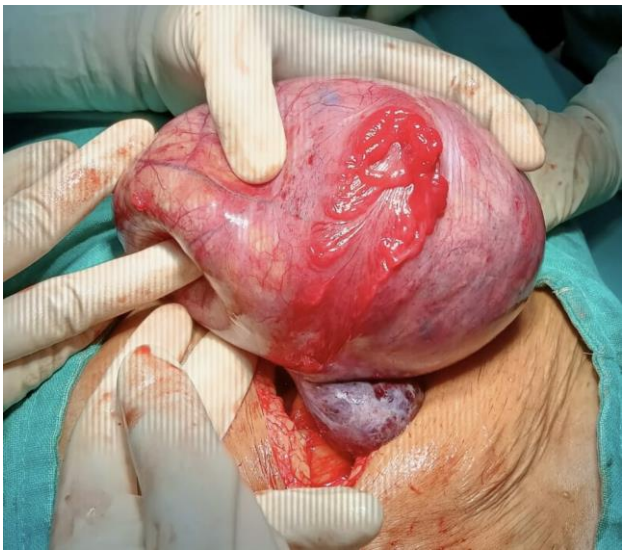

Figure 1: Left sided hydrosalpinx at laparotomy.

DISCUSSION

Acute pain in abdomen is a common complaint at all ages.[3] The commonest non gynaecological causes of acute pain abdomen in pregnancy are acute appendicitis followed by acute cholecystitis.[1-3] Most important gynaecological differential diagnosis to be ruled out is rupture ectopic pregnancy which is suggested by ultrasound findings of adnexal mass with free fluid in peritoneal cavity. Adnexal torsion is an uncommon cause of acute abdomen in pregnancy and isolated fallopian tube torsion without ovarian involvement accounts for a very small number of cases.[1-3]

Jo reported a case of fallopian tube torsion due to benign tumour in the third trimester of pregnancy with similar clinical presentation. They managed their case with laparoscopy. They also reviewed literature for isolated tubal torsion for past 11 years and found only 23 cases.[1] Most of them had laparotomy and good pregnancy outcomes. They suggest that, the laparoscopy should be preferred over laparotomy in third trimester of pregnancy. However, laparotomy was done in our case as laparoscopy is not available in emergency hours at our set up.

Obstruction of the fallopian tube causing fluid accumulation in it is called hydrosalpinx. Usually, it is asymptomatic but it can present as abdominal or pelvic mass and/or pain. It is a major cause of infertility. In medical literature there are many case reports and studies about salpingitis, hydrosalpinx, there role in causing infertility and its management in infertile patients. Also, about various treatment options on how treatment of hydrosalpinx improved success rate of IVF and ART.

Isolated fallopian tube torsion was reported by Bland Sutton in 1890, a rare gynecological cause of acute lower abdominal pain with incidence of 1 in 15,00,000.[4]

Origoni et al studied isolated tube torsion in pregnancy and reported that adnexal torsion is an uncommon cause of acute abdomen in pregnancy. Isolated fallopian tube twisting accounts for even lesser number. The In 90% of the cases right side was involved. They reviewed the literature and retrieved only 19 cases of isolated fallopian tube torsion in pregnancy treated surgically from 1936 to today, including one they published.[4]

Mention of hydrosalpinx with pregnancy goes back to 1948 by Hadly, however, there is no abstract available for the same in literature.[5]

Dahdouh et al also reported a case of massive right sided hydrosalpinx which presented to them with acute pain abdomen in third trimester of pregnancy. It was diagnosed on MRI and it responded to conservative management. No surgical intervention was done the mass gradually resolved in follow up scans and their patient later on delivered a heathy baby vaginally.[6] This finding can be explained with absence of partial/ complete torsion with the adnexal mass.

There is no specific guidelines for the treatment of hydrosalpinx during pregnancy.

Qian et al reported a case of isolated fallopian tube torsion (IFTT) in adolescent girl and commented that it is a rare cause of gynecological acute abdomen which often occurs in adolescence (mean age=15 years), may induce fallopian torsion if size reaches more than 5 cm and most common clinical presentation is acute abdomen.[7]

Our patient had acute pain abdomen which was not relieved on conservative management. This could be explained by associated torsion of hydrosalpinx. Therefore, surgical intervention was necessary. This case report emphasizes that hydrosalpinx with or without

torsion has to be kept as a differential diagnosis in cases of acute abdominal pain. In absence of specific guidelines for its management, treatment has to be individualized. Those without torsion are expected to improve with conservative therapy, those who don't improve on conservative therapy might have partial/ complete torsion requiring surgical approach performing detorting and excising hydrosalpinx.

Providing progesterone support provides uterine quiescence and prevents preterm labour pains, thus helping pregnancy to continue without harm to fetus. Thus, both mother and fetus are saved.

CONCLUSION

In women of reproductive age, isolated fallopian tubal torsion is rare and it is even rarer during pregnancy. We have reported a unique case of left sided hydrosalpinx with torsion in second trimester of pregnancy. This should be considered as one of the differential diagnoses for the acute abdomen in pregnancy. Further management for the same has to be individualized in absence of specific guidelines.

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