Case Report

Fallopian Tube Torsion Presenting As Acute Abdomen in Pregnancy

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ABSTRACT

A 27 year primigravida at 32 weeks pregnancy presented with acute abdomen simulating tortion of ovarian cyst, who underwent laparotomy for the same, unilateral left sided salpingectomy was done with the diagnosis of fallopian tube torsion. Post operative period was uneventful, had a full term vaginal delivery with a healthy baby. Early diagnosis & surgical intervention will decrease obstetric morbidity & may allow preservation of fallopian tube.

Keywords: acute abdomen in pregnancy, fallopian tube torsion.

INTRODUCTION

Isolated fallopian tube torsion during pregnancy is a rare condition presenting as acute abdomen, which is an obstetrical emergency. The incidence of 1 in 1,500,000 women, 12% cases are associated with pregnancy. (1) Right side involvement is more than left. Diagnosis is often difficult & established at surgery. We present a case of acute abdomen due to left fallopian tube torsion in pregnancy.

Objective is to share our experience in managing this emergency condition, rare but acute surgical condition in pregnancy.

CASE REPORT

A 27 year old primigravida of 32 weeks gestation presented to ESICMC & PGIMSR with history of pain in abdomen radiating to left flank since 10 hours associated with fever. No history of bleeding per vagina or leaking per vagina.

On examination: Patient was conscious & well oriented Febrile, temp- 99 ⁰F , no pallor, pulse 90/min, BP : 130/80mm hg CVS & RS: normal, Per abdomen: uterus 32 weeks size, relaxed, non tender, FHS 140/min, tenderness in lumbar region & renal angle. Per vagina examination: cervix closed, 3cms long, posterior unaffected.

Investigations:

Haematological & serology investigations were normal except for raised total count. Ultrasonography findings were single live intrauterine gestation 32 weeks, breech presentation & left ovarian cyst of 4.3x2.3 cms. She was conservatively managed with analgesics, antibiotics, since the intensity of pain increased; MRI was planned, which showed left ovarian cyst 4.5x3.7 cms with torsion. Correlating
clinical findings, emergency laparotomy was proceeded.

**Laparotomy findings:**
There was torsion of left fallopian tube, which was haemorrhagic, ovary was congested otherwise was normal. Right fallopian tube & ovary was normal. Left sided salpingectomy was performed & abdomen closed in layers. Postoperative period was uneventful, sutures were removed and discharged on 7th postoperative day. The histopathology report showed torsion of the left fallopian tube with haematosalpinx.

Patient came for regular follow up.
At 37 wks of gestation she presented with premature rupture of membranes, for which she was induced with tab PGE1 25microgram 3 doses, had outlet forceps delivery (ind: direct occipito posterior ) of a live term male baby with good apgar at birth & birth weight of 2.75kg. no PPH or tears. Both mother & baby were well, discharged after 72hrs.

**DISCUSSION**
Torsion of fallopian tube in pregnancy is a rare cause of pain abdomen. The aetiology is varied factors like anatomical abnormalities, or even with normal fallopian tube. \(^{(2)}\)
Condition occurred in first trimester in 7.7% cases, second trimester 23.1% cases, third trimester 61.5% cases and intra partum 7.7% case. \(^{(3)}\) Youssef et al noted factors that could possibly influence occurrence of fallopian tube torsion divided into two categories intrinsic factors such as congenital anomalies of fallopian tube, acquired pathology of fallopian tube example, hydrosalpinx, hematosalpinx, neoplasm, surgery, Pelvic inflammatory disease and Physiological abnormalities like abnormal peristalsis, tubal spasm, interstitial
peristalsis and hemodynamic abnormalities. Extrinsic factors for example changes in neighbouring organs, adhesions, pregnancy, mechanical factors, trauma to pelvic organs or pelvic congestion.\(^4\) Presenting symptoms are sudden onset of lower quadrant pain, sometimes radiating to thigh or groin, nausea, fever.\(^5\) Collectively, the existing reports indicate that the mechanism underlying tubal torsion is apparently a sequential mechanical event. The process begins with the mechanical blockage of the adnexal veins and lymphatic vessels by ovarian tumour, pregnancy, hydrosalpinx or pelvic adhesions after tubal infection or pelvic operation. This obstruction causes pelvic congestion and local edema with subsequent enlargement of the adnexa, which in turn induces partial or complete torsion.\(^6\) A tender adnexal mass may be palpable, cervical tenderness may be present. WBC count may be normal or high. ESR may be slightly elevated. Ultrasonography is helpful for diagnosis. High impedance, reversal or absence of vascular flow in the tube has also been reported although, in practice, confident spectral Doppler analysis of the tubal wall may be difficult.\(^7\) Reported Computed Technology (CT) findings of isolated tubal torsion include an adnexal mass, a twisted appearance to the fallopian tube, dilated tube greater than 15mm, a thickened and enhancing tubal wall and luminal CT attenuation greater than 50HU consistent with haemorrhage. Secondary signs include free intrapelvic fluid, peritubular fat stranding, enhancement and thickening of the broad ligament and regional ileus.\(^8,9\) The available laboratory or imaging studies cannot confirm fallopian tube torsion. Ultimately the diagnosis is generally made at the time of surgical exploration. The symptoms, signs and physical findings are associated with other conditions like ovarian cyst torsion, abruption placenta, renal colic, appendicitis, main diagnosis is often established at laparoscopy or laparotomy.\(^10\) Management consists of early diagnosis and surgery. Laparotomy, salpingectomy is performed. Laparoscopy has been described in the management of twisted fallopian tube, & is safe in first trimester of pregnancy. If torsion is of recent onset; it can be untwisted and preserved. Salpingectomy is best for a tube that is beyond recovery.\(^10\) In this case, laparotomy as a management was suitable because of enlarged uterine size of 32 weeks, salpingectomy was ideal for hemorrhagic fallopian tube due to torsion.

**CONCLUSION**

Although torsion of fallopian tube during pregnancy is uncommon, obstetricians need to maintain high index of suspicion for this uncommon & difficult to diagnose cause of pain abdomen. Early diagnosis & surgical intervention will decrease obstetric morbidity & may allow preservation of fallopian tube.

**REFERENCES**
