

Case of isolated fallopian tube torsion in term pregnancy

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Abstract:

While torsion of adnexa is still common, we report a rare case of isolated torsion of fallopian tube in full term pregnancy which has an incidence of 1 in 1.5 million women. The condition is frequently misdiagnosed as acute appendicitis or ovarian torsion. The right fallopian tube is most commonly involved. In our case the specific diagnosis was made after surgery and she was managed by simultaneous salpingectomy with cesarean section.

Keywords: Fallopian tube, torsion, pain, pregnancy.

Isolated fallopian tube torsion in pregnancy is very rare. Regad¹ reported that only 12% of isolated torsion of tube was associated with pregnancy. Phupong et al² observed only 1 case in 120,000 pregnancies over a ten-year period (1991-2000) at their institute. Others reported only 16 to 20 cases of isolated fallopian tube torsion in pregnancy from 1936 till today³⁻⁵. Cases of isolated torsion of the fallopian tube in the third trimester of pregnancy are especially rare.

Case

A 28 year old second gravida, with previous miscarriage was admitted at 37.3 weeks of gestation with severe pain abdomen. The pain was moderate, acute and situated in right middle abdomen just 2 cms from umbilicus. Patient also indicated feeling tightness of uterus occasionally. There was no fever or nausea and vomiting nor there was any previous history of similar pain or previous illness. Menstrual periods were regular before pregnancy. It was her second pregnancy, first one being a miscarriage at 7 weeks. Her antenatal check ups were uneventful and her pregnancy so far was uncomplicated. Her vital signs were fine and she was afebrile.

Physical examination revealed a uterus of term size but mildly irritable. The foetus was in cephalic presentation with regular FHR of 160 beats/min. There was acute tenderness 2 cms from umbilicus in abdomen on right side. Per vaginum examination showed that she was 1 cm dilated with 40% effacement and vertex at - 3 station. As she was in early labor the pain reported was a little vague and patient was confused assuming she was getting labor contractions as well. Admission hematocrit was 32%, TLC of 13,000/mm³ with neutrophils 80%. Urine was normal. Due to simultaneous labor, separate diagnosis was not possible and we let her progress.

As she progressed in labor, fetal distress started and she was taken for emergency LSCS. A gangrenous 6x3 cm, necrosed, congested right tube was found on examination (figure 1). There was mild hydrosalphix as well. After delivery of the baby, the uterus was closed and salpingectomy performed after consent as tube was not salvageable. The left fallopian tube, both ovaries and appendix did not show any abnormality.



Figure 1: Right sided gangrenous, necrosed, congested fallopian tube

Histological examination showed recent congestion, necrosis and haemorrhage in wall of fallopian tube suggestive of torsion. Her post-operative period was uneventful. She was discharged on 3rd postoperative day and her follow-up was uneventful.

Discussion

Etiologies of torsion of fallopian tube in pregnancy can be due to unknown causes, anatomical causes (haematosalpinx and hydrosalpinx, long mesosalpinx), physiological abnormalities (hypermotility of the tubes, peristalsis of intestines), hemodynamic abnormalities (venous congestion in the mesosalpinx), Sellheim theory (sudden body position changes), trauma, previous surgery or disease (tubal ligation, pelvic inflammatory disease), and gravid uterus ⁶.

As patient had good health in this case, the reason could have been pregnancy, body posture changes and maybe hemodynamic abnormalities. But because of the presence of sigmoid colon on the left and the slow venous drainage on the right with resultant congestion, torsion in right side is seen more frequently. The most common presenting complaints is sudden cramping, intermittent lower abdomen pain that often radiates to the flank or thigh. Other associated symptoms include nausea, vomiting, increased frequency of micturation, loose motion, or difficult defecation. The body temperature is raised. The WBC count and ESR may be slightly elevated.

Pelvic examination might be difficult to ascertain diagnosis as ovaries move up and adnexae are hidden below pregnant uterus. Ultrasound is helpful to establish the diagnosis. The ultrasonographic appearance includes an elongated, convoluted cystic mass, tapering as it nears the uterine cornu and demonstration of the ipsilateral ovary. Reversal or absence of vascular flow in the tube has also been reported, although, in practice, spectral Doppler analysis of the tubal wall may be difficult ⁷.

The signs, symptoms and physical findings are associated with other common diseases the diagnosis is generally confirmed after surgery. The differential diagnosis includes acute appendicitis, ectopic pregnancy, pelvic inflammatory disease, twisted ovarian cyst, ruptured follicular cyst, urinary tract disease, renal colic, degenerative leiomyoma, and abruptio placenta.

Management is by early diagnosis and surgery. A correct early diagnosis is important for patients to preserve their fertility if ischemic damage appears to be reversible. When the tissue is gangrenous, a salpingectomy is necessary.

Laprotomy is safe, traditional method of management of such a case although laparoscopy has been found to be safe in first and second trimester of pregnancy. If tube is gangrenous, salpingectomy is preferred but if it's a recent torsion, untwisting the tube can also be done. In this case laparotomy was suitable as foetus was term and delivery was possible by cesarean followed by salpingectomy.

Conclusion

Although torsion of fallopian tube in pregnancy is rare but it should be included in differential diagnosis of acute abdomen. Imaging techniques can be suggestive but not confirmatory. If ultrasound is not confirmatory, MRI can help in establishing the correct diagnosis. Early diagnosis is important for preserving the tube. But its generally difficult as symptoms are not specific.

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