Adnexal Torsion During First Trimester of Pregnancy: A Case Report

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ABSTRACT

Introduction: Adnexal torsion is an emergency condition where the adnexa rotate on its pedicle compromising their blood supply. It is a rare cause of acute abdominal pain during pregnancy and a true obstetric emergency. Here we report a case of adnexal torsion during pregnancy without any predisposing factor.

Case Report: A 22-year-old primi gravida at 11 weeks of Gestational Age presented with abdominal pain and vomiting. With the working diagnosis of torsion of ovary, laparotomy was done which revealed torsion of right adnexa thrice for which salpingo-oophorectomy was performed. Her postoperative period was uneventful with a viable intrauterine pregnancy.

Conclusion: The diagnosis of adnexal torsion during pregnancy is often missed due to nonspecific clinical features and uncommon objective findings. Treatment options are limited to surgery either by laparoscopy or laparotomy but the former becomes more difficult in the second trimester. Earlier decision to proceed with surgery is difficult due to the diagnostic dilemma and also considering the pregnancy.

Keywords: adnexal torsion, pregnancy, doppler

INTRODUCTION

Adnexal torsion is a rare cause of acute abdomen during pregnancy. The incidence of adnexal torsion is 5/10000 pregnancies.1 As this condition is very rare, a high index of suspicion is required to arrive at our diagnosis. The clinical findings of torsion are non-specific. The exact role of imaging techniques is debated.2 Treatment of adnexal torsion is considered as an emergency because peritonitis and death can result.3 Although it is seen more frequently in patients undergoing ovarian stimulation in the treatment of infertility and in patients who have had an ovarian cyst diagnosed before, here we report a case of adnexal torsion during pregnancy without any predisposing factor.

CASE REPORT

A 22-year-old primi gravida presented to our Department of Obstetrics and Gynaecology at 11 weeks of Gestational Age based on her Last Menstrual Period with intractable vomiting. She had undergone torsion three times around its pedicle. Uterus was gravid and left adnexa was normal, appendix was normal. Right salpingo-oophorectomy was performed and sent for histopathology. Histopathological examination confirmed the finding as necrosed ovary and fallopian tube. After laparotomy, patient was administered intramuscular micronized progesterone daily and HCG weekly twice for 2 weeks. Her postoperative period was uneventful with viable intrauterine pregnancy confirmed on her second postoperative day. She is now in her third trimester of pregnancy and on regular antenatal checkup.

DISCUSSION

Adnexal torsion is the condition where the adnexa rotates on its pedicle compressing its blood supply leading to stasis, venous congestion, haemorrhage and necrosis. The signs

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of adnexal torsion include a palpable pelvic mass, signs of localized peritoneal irritation, a low grade fever, and leukocytosis. Preoperative diagnosis is difficult, especially in pregnant women. Patient usually presents with acute abdomen and pelvic examination may reveal a tender cystic mass separate from the uterus. During pregnancy, the clinical symptoms are non-specific and could be confused with other acute abdominal conditions such as acute appendicitis, ruptured corpus luteum cyst, adnexal abscess, ovarian hyperstimulation, urinary obstruction, and ectopic pregnancy. Ultrasonography is the primary imaging modality for evaluation of adnexal torsion. Ultrasonography features of adnexal torsion include a unilateral enlarged ovary, uniform peripheral cystic structures, a coexistent mass within the affected ovary, free pelvic fluid, lack of arterial or venous flow, and a twisted vascular pedicle. Colour Doppler sonography showing absence of intraparenchymal ovarian blood flow seems to be a promising tool in a diagnosis of adnexal torsion. However, a decreased blood flow can also indicate an incomplete torsion. Expedient surgery is the treatment of choice for adnexal torsion. Treatment of adnexal torsion is considered an emergency because peritonitis and death can result. Standard surgical techniques for management of adnexal torsion include laparotomy with detorsion or salpingo-oophorectomy. Although laparoscopic approach combined with simple detorsion has been described recently, laparotomy and salpingo-oophorectomy may sometimes be necessary as in our case.7 Several recent reports have described successful conservative management with untwisting of the twisted adnexa.8 The decision to proceed to surgery during pregnancy is somewhat complex as in our case, since the well being of both mother and fetus must be taken into account. The risk of any surgery to the pregnancy will depend on the gestational age. In the first trimester when ovarian torsion most often occur in pregnancy, the risk of fetal loss is the smallest with modern anaesthetic techniques. Role of progesterone and other tocolytics during and after surgery is still controversial. However, if the corpus luteum cyst is removed during salpingo-oophorectomy, supplemental progesterone and human chorionic gonadotropin is indicated.9

In a study done by Chang et al on surgical intervention for maternal ovarian torsion in pregnancy, out of 20 pregnant women operated for ovarian torsion 12(60%) had term deliveries, 3(15%) preterm deliveries, 1 missed abortion and 4 elective abortions in the first trimester.9

**CONCLUSION**

Adnexal torsion, even though is a rare condition in pregnancy, it should be one of the differential diagnosis of acute abdomen and may occur even in the absence of cysts or any predisposing factors.

**REFERENCES**


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**Figure-1:** Torsion of Right adnexa with gangrenous appearance.