Isolated fallopian tube torsion in pregnancy: an uncommon event

Abstract

Isolated torsion of a fallopian tube in the third trimester of pregnancy is an uncommon event. Expedient diagnosis warrants a prompt management in view of better postoperative well-being for both mother and the fetus. Therefore, it can be challenging because the symptoms are relatively non-specific. The ultrasound findings may be suggestive but the diagnosis is only made after the surgical exploration and histopathology.

We present a case of isolated tubal torsion in a primigravida occurring in the third trimester managed by laparotomic salpingectomy.

Keywords: fallopian tube torsion, acute abdomen, pregnancy, laparotomy

Introduction

Isolated fallopian tube torsion is an uncommon cause of acute, lower abdominal pain in women of reproductive age and even more rare during pregnancy. The incidence is approximately one in one-and-a-half million females. The etiologies of torsion of the fallopian tube are unknown. The clinical characteristics and the imaging studies are not specific, diagnosis can be challenging and difficult which may delay managing this condition in a timely fashion. Laparotomy and laparoscopy are important tools in the diagnosis and prognosis of isolated torsion of a fallopian tube, and can help to preserve the fertility of this patients. We present a case of 30 weeks pregnancy with a right Fallopian tube torsion which was managed successfully in our institution by laparotomic salpingectomy.

Case report

A 23-year-old healthy primigravida was admitted to the Center of Reproductive Health atthe 30th week of pregnancy with complaints of lower abdominal pain for 3days. The patient had no previous history of a similar pain or of any previous illness. The pregnancy had been uneventful until the occurrence of the pain which was constant, acute and situated in the right lower abdomen. The patient’s vital signs were stable, and she was afebrile. Physical examination revealed tenderness in the right lower abdomen without palpable masses and a soft abdomen. The uterine fundal height corresponded to the period of gestation.

The ultrasound study revealed a single, life fetus, with a biometry compatible to a 30weeks pregnancy, with normal amniotic fluid volume and with a normal placenta with no signs of abruption. Kidneys and renal tract were normal. The appendix was also normal but we visualised a 60*30mm hypoechoic mass probably with a normal placenta with no signs of abruption. The right adnexa, the tube was dilated, twisted about its longitudinal axis and necrotic (Figure 1). Left tube, ovaries and the appendix were normal in appearance. The torted hydrosalpinx was detorted; however, the fallopian tube had been compromised because of the gangrenous aspect and it was necessary to proceed with removal.

The laboratory blood parameters were normal with 11.7×103/L white blood cells (WBCs) and parameters for urine and liver function were also normal. The acute onset of pain, physical finding, and detection of an adnexal mass with whirlpool sign on ultrasonography raised suspicion of torsion of the right adnal structures.

The patient was informed of the risk of maternal morbidity and mortality and of premature labour. Consented for an exploratory diagnostic and therapeutic surgery. So, we performed an urgent Pfannenstiel laparotomy (lack of laparoscopic equipment). On the right adnexa, the tube was dilated, twisted about its longitudinal axis and necrotic (Figure 1). Left tube, ovaries and the appendix were normal in appearance. The torted hydrosalpinx was detorted; however, the fallopian tube had been compromised because of the gangrenous aspect and it was necessary to proceed with removal. A right salpingectomy was performed. Intra operative period was covered with injection of terbutalin 0.5mg to prevent premature uterine contraction.

Figure 1 Per operative view.

White arrow, the pedicle torsion of the right Fallopian tube; Blue arrow, normal right ovary; Red arrow, the gangrenous fallopian tube.

The diagnosis of Fallopian tube torsion and hydrosalpinx was confirmed by the histopathological examination.

The patient was discharged on the third day after surgery without any complains or surgical and obstetric complication. A control of fetal well-being was performed.
Isolated fallopian tube torsion in pregnancy is an uncommon event. This condition should be considered in the differential diagnosis of acute pelvic pain with cystic adnexal mass associated with a normal ipsilateral ovary. Imaging techniques may be suggestive but not conclusive. The laparoscopy is the gold standard for its definitive diagnosis and can also be used simultaneously to make a differential diagnosis. Despite these considerations, we believe that laparoscopy represents a valid treatment option until 32–34 weeks of gestation. The salpingectomy was ideal for the gangrenous fallopian tube as a result of torsion.

Our patient underwent a laparotomic salpingectomy because of the gangrenous fallopian tube. The post-operative period was uneventful and the patient successfully completes her pregnancy without further complications.

Conclusion

Isolated fallopian tube torsion occurring in pregnancy is an uncommon event. This condition should be considered in the differential diagnosis of acute pelvic pain with cystic adnexal mass associated with a normal ipsilateral ovary. Imaging techniques may be suggestive but not conclusive. The laparoscopy is the gold standard for its definitive diagnosis and can also be used simultaneously to manage the disorder. Laparotomy should be delayed in the third trimester of pregnancy. A timely diagnosis is important to prevent adverse sequelae and preserve fertility.

Acknowledgements

None.

Conflicts of interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

References


DOI: 10.15406/mojcr.2017.07.00192

Copyright: ©2017 Ouassour et al.


