CASE REPORT

Isolated fallopian tube torsion with pregnancy

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ABSTRACT

Isolated torsion of fallopian tube occurring in pregnancy is very rare. This entity should be considered in the differential diagnosis of acute pelvic pain in early pregnancy. We present a case report of an isolated fallopian tube torsion in a multiparous woman at 8 weeks gestation who had previously undergone IVF.

Keywords: Fallopian tube, torsion, pregnancy.

Torsion of the fallopian tube without ovarian torsion is a rare condition. Adnexal torsion can occur in all age groups. Expedient diagnosis is important to prevent adverse sequelae. Since the symptoms are non-specific, diagnosis can be challenging. Laparoscopy is often necessary to establish the diagnosis. This is a case report of isolated fallopian tube torsion with pregnancy from Rotunda hospital Dublin.

Case Presentation

A 36-year-old woman, presented to Rotunda Hospital Emergency Room at 8 weeks gestation with a three day history of constant right lower abdominal pain. She had undergone ovarian IVF with implantation of 2 embryos. An intrauterine gestational sac (IUGS) had previously been confirmed on ultrasound. On examination, her vital signs were normal. Abdominal examination revealed soft abdomen but tenderness in right iliac fossa. Vaginal examination demonstrated a palpable right adnexal mass and cervical excitation. Her past obstetric history was unremarkable. She had history of endometriosis on right side. Ultrasound examination demonstrated a normal intrauterine viable pregnancy corresponding to gestational age 9 weeks and 5 days. Right ovary was abnormal measuring 35x20mm with corpus luteal cyst seen. A large complex mass was found adjacent to the right ovary. Left ovary was normal. There was free fluid in pouch of Douglas, measuring 2.0mmx2.0mm .Diagnostic laparoscopy was performed for a differential diagnosis of a heterotopic pregnancy. At laparoscopy, the right ovary was multicystic but not torted, however the right fallopian tube was torted and suffused, but not necrosed. There was no evidence of an ectopic pregnancy. Laparoscopic correction of the tubal torsion was performed. Post-operative the patient was pain free. She is currently 18 weeks pregnant.

Discussion

Isolated fallopian tube torsion is a rare, but important cause of lower abdominal pain in the women during reproductive years [1]. This condition is often

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difficult to evaluate clinically, and surgery is often required to establish the diagnosis [2]. It occurs without ipsilateral ovarian involvement. It is associated with many conditions such as pregnancy, haemosalpinx, hydrosalpinx, ovarian or paraovarian cysts and other adnexal alteration or it can even occur with an otherwise normal fallopian tube [3]. The exact etiology is unknown [4].

Yousef et al described the factors that can influence the occurrence of fallopian tube torsion. He divided them into 2 main categories: A. Acquired pathology of fallopian tube e.g, hydrosalpinx, anatomical dysfunction, surgery, neoplasm, and abnormal peristalsis. B. Extrinsic factors for example, changes in neighbouring organs such as neoplasm, adhesions, pregnancy, mechanical factors, movement or trauma to the pelvic organs or pelvic congestion [5].

In our case the underlying mechanism of tubal torsion is apparently a sequential mechanical event. This process begins with mechanical blockage of adnexal veins and lymphatic vessels by the pregnancy. This obstruction caused pelvic congestion and local edema which resulted in the enlargement of the adnexa, and induced partial or complete torsion [6]. Due to presence of sigmoid colon on left side which slow down the venous drainage and may cause congestion, right fallopian tube is more commonly affected [7,8]. Laparoscopy is currently the most specific diagnostic tool for evaluating torsion and treating this condition. Currently, the procedure of choice is laparoscopic adnexal detorsion, not adnexectomy [4]. As most of the patients are in their reproductive years, efforts should be made to preserve fertility. This is after exclusion of both irreversible ischaemic damage and malignancy. A complete resection is performed when the tissue is gangrenous, or if there is tubal or ovarian neoplasm or the woman has completed her family. When there is no apparent ischaemic damage most of the twisted adnexa regain their function.

Recovery is much faster after laparoscopy, with less pelvic adhesions which is particularly important for women of reproductive age who wish to preserve their fertility.

Conclusion

Isolated fallopian tube torsion is rare. Expedient diagnosis is important to prevent tubal necrosis. Stimulated ovaries can increase the risk of fallopian tube torsion, this condition should be included in the differential diagnosis of lower abdominal pain during pregnancy.

Conflict of interest: None. **Disclaimer:** Nil.

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