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Adnexal torsion in a first-trimester pregnant patient without any predisposing factor: A case report

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SUMMARY

Introduction: *Adnexal torsion is rarely seen during pregnancy. Torsion usually occurs in ovaries with previously diagnosed cysts and tumors. It is rare for a previously normal ovary to undergo torsion in advanced gestation.*

Case presentation: *Here, we report a case of adnexal torsion during the 9th week of pregnancy without any predisposing factors. The patient was admitted to emergency department with moderate lower abdominal pain and nausea. With the worsening of clinical and ultrasonographic signs a right salpingo-ooforectomy was performed.*

Conclusion: *Adnexal torsion, though rare, should be kept in mind in the differential diagnosis of lower abdominal pain in advanced gestation.*

Key words: *Adnexal torsion, first trimester pregnancy, lower abdominal pain*

ÖZET

Herhangi bir predispozan faktörü olmayan birinci trimester bir gebe hastada adneksiyel torsiyon: Bir olgu sunumu

Giriş: *Adneksiyal torsiyon gebelikte nadir görülür. Torsiyon genellikle daha önce tanı almış kist ya da tümörü oan overlerde meydana gelir. Normal bir overin ilerleyen gebelikte torsiyone olması nadirdir.*

Olgu Sunumu: *Burada, herhangi bir predispozan faktörü olmayan 9 haftalık bir gebede adneksiyal torsiyon olgusunu sunduk. Hasta acil bölümümüze orta şiddetli pelvik ağrı ve bulantı şikayeti ile başvurdu. Klinik ve ultrasonografik bulguların kötüleşmesi sebebiyle sağ salpingo-ooferektomi yapıldı.*

Sonuç: *Her ne kadar nadir görülse de, adneksiyal torsiyon pelvik ağrı ile başvuran gebelerde ayırıcı tanı olarak akılda tutulmalıdır.*

Anahtar kelimeler: *Adneksiyal torsiyon, birinci trimestr gebelik, alt abdominal ağrı*

A 27 year old multigravida woman (gravida 3 para 1 abortus 1; G3P1A1) presented to our emergency department with a mild right lower abdominal pain and nausea of 2 days duration. She had no fever and she gave no history of vaginal bleeding, diarrhea, constipation and any urinary compliants. There was no history of previous over cyst, ovulation induction therapy or any operation. After counselling acute appendicitis and renal colic were excluded by general surgery and urology departments.

On examination, the patient was afebrile and her vital signs were stable. Abdominal examination revealed mild tenderness on palpation in right lower quadrant. Deep palpation on this side provoked no abdominal guarding. On vaginal examination, cervix was painful with movement. No periappendicular inflammation was detectable and no bowel dilatation or ascites were seen on abdominal ultrasound scan. A vaginal ultrasound scan revealed a single 9 week CRL corresponded to gestational age with regular heart rate at 162bpm. A large (6.6x6.4 cm) anechoic cyst with regular wall and surrounded by a scant amount of ovarian tissue was discovered in the pouch of Douglas and left adnexa was normal with no cystic-solid formation (Figure 1).

The Colour Doppler sonogram showed decreased blood flow in the adnexal mass. The laboratory workup showed abnormal white blood cell count

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(19.000/mm^3), haemoglobin (1.5 gr/dL), hematocrit (35.4 %) levels whereas C-reactive protein, liver-, and kidney enzymes, and ionograms were within the normal range. Urinalysis showed normal parameters. Because of the adnexal torsion can not be diagnosed with any certainty only on the basis of decreased vascular flow, it was decided to treat the patient with pain killers and serums, which gave a slight improvement in the symptomatology. Eight hours later, on repeated vaginal ultrasound scans, increase in cyst size, and free fluid with coagulum surrounding the cyst were seen. In the laboratory control, haemoglobin decreased to 10.5 gr/dL, hematocrit to 29.7 % and white blood cell count increased to 22.000/mm^3. With the provisional diagnosis of torsion, emergency laparotomy was performed

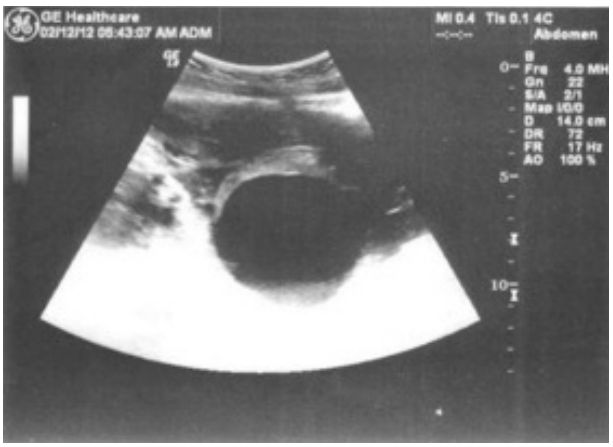

Figure 1. Transvaginal view of right ovary, anechoic cyst with regular wall and surrounded by a scant amount of ovarian tissue.

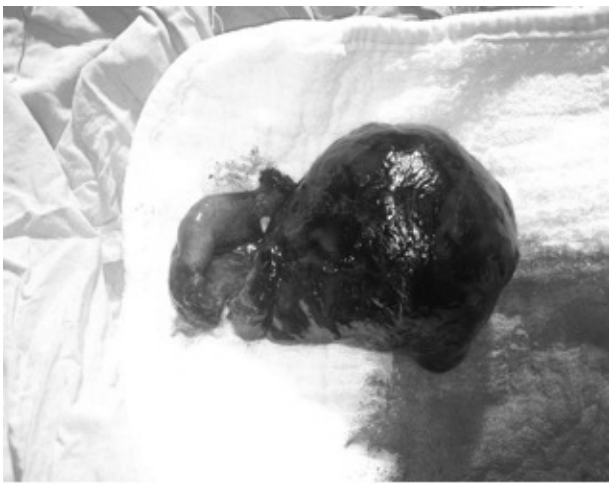

Figure 2. Macroscopic view, gangrenous enlarged ovary and fallopian tube.

under general anaesthesia through pfannenstiel incision. Minimal blood-stained peritoneal fluid was noted in the abdomen. The right adnexa was localized in the pouch of Douglas and measured about 8x8 cm in diameter. It was gangrenous and had undergone torsion three times around its pedicle. The right fallopian tube was hydropic.

The appendix and the left adnexa were normal in appearance. After decision that untwisting the adnexa would be ineffectual because of widespread necrosis, a right salpingo-oophorectomy was performed. The material was sent to pathology for examination. Her histopathology report confirmed a gangrenous ovary and fallopian tube and the patient experienced an uneventful postoperative period. After gas, and fecal discharge the patient was discharged from the hospital two days after her admittance.

MANAGEMENT

After laparotomy, because of excision of corpus luteum, intramuscular proluton depot 500 mg/2 mL was administered once a week. I ntravenous 2000 cc fluid in a day was given until discharge, and oral progesterone in a total dose of 600 mg was started until 13-14. gestation week, in addition to indomethacin (25 mg) suppositories were applied rectally three times a day for three days. On control ultrasound scan, regular heart beats were noted.

DISCUSSION

Diagnosis of adnexal torsion is not usually possible by non-specific symptoms common in pregnancy. Early diagnosis is essential as it enables application of a conservative approach. When diagnosis is made early, simple detorsion is possible with good functional results. Although the use of colour Doppler sonography, with the main sign of the absence of intraparenchymal ovarian blood flow, seems to be promising in establishing the diagnosis, a decreased blood flow, which could have been the result of incomplete torsion, should not rule out the suspicion of adnexal torsion. Nowadays, MRI appears to be a

potential alternative, as it can demonstrate signs of hemorrhagic infarction.

Recently, laparoscopic surgery during advanced pregnancy has been reported to be feasible and safe, however, it needs skilled personnel who have wide experience in operative gyneacological laparoscopy and also sophisticated equipment.

Untwisting the adnexa which provides a satisfactory recovery, and aspiration of ovarian cysts, if present, are recommended as the first surgical alternative.

In our case, because of the lack of laparoscopy experience on a pregnant patient, we performed a laparotomy through a pfannenstiel incision, and try to untwist the adnexa because of widespread necrosis.

CONCLUSION

An early diagnosis might have help to conserve patient's adnexa. Though it is an extremely rare problem in pregnancy, adnexal torsion should be taken into consideration in the differential diagnosis of abdominal pain and it should not be forgotten that adnexal torsion may occur even in the absence of previous ovarian cysts.

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