International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103 (Online)
An Open Access, Online International Journal Available at http://www.cibtech.org/jms.htm
2015 Vol. 5 (3) September-December, pp. 14-16/Kale and Kamble
Case Report

INTERESTING CASE OF ADNEXAL MASS TORSION

***Tejaswini Kale (Pingle) and Savita Kamble**
Department of Obstetrics and Gynaecology, B.J. Medical College, SGH Pune
**Author of Correspondence*

ABSTRACT
Adnexal torsion is one of the causes of pain in the lower abdomen. Patients with ovarian torsion often present with sudden onset of sharp and usually unilateral abdominal pain. Majority cases there is associated nausea and vomiting, though that was not present in our case Gynaecological ultrasonography is the imaging modality of choice but still preoperative diagnosis of ovarian torsion is many times difficult and definitive diagnosis is often made in operating room. Emergency laparoscopy or laparotomy on clinical diagnosis has definitive role to save patients life. Here is a case of adnexal torsion came in emergency which required emergency laparotomy. In our case gangrenous changes in the ovary and tube were already present and revascularization was not seen even after untwisting of adnexae hence removal of adnexae was the only treatment of choice in an order to avoid complication like toxic shock syndrome and to save the paitent's life.

Keywords: *Adnexal Torsion, Whirlpool Sign, Absent Ovarian Flow*

CASES
A 27 years female married since 6 years, P3L3 tubectomised, came to the sass on general hospital with complaints of –Pain in abdomen since one day more on right side. There was no associated amenorrhea, fever, nausea, vomiting, pervaginal bleeding or any bowel bladder complaints.
On general examination patient was afebrile with vital parameters stable. Per abdominal examination revealed midline vertical tubal ligatiion scar (2cm) present. There was minimal tenderness in right iliac region but no guarding, rigidity, distention. There was no mass palpable. On per vaginal examination leftforniceal mass (8cm×8cm) was present, cystic in consistency, mobile, extending from anterior side of uterus to its left side. There was tenderness present over mass and in left fornix. Right fornix was free and no cervical motion tenderness. Uterus was felt separately from mass, retroverted, normal sized and mobile.

Figure 1: Posterior surface of uterus with twisted right pedicle

Case Report

Ultrasonography was suggestive of simple cyst in right ovary (8.3cm×4.9cm) present in left adnexa, arterial and venous flow were normal may be suggestive of repeated episodes of torsion anddetorsion. Patient was taken emergency laparotomy after emergency blood investigation. Intraoperative there was evidence of 10cm×8cm×6cm right ovarian haemorrhagic cyst with torsion of ovarian and fallopian tube pedicle of 3 coils and tubal oedema. Whole mass was present anterior and to the left of the uterus (Figure 1). It was soft to cystic in consistency, black in colour, smooth surface .Left ovary & fallopian tube was normal. As right ovary and tube was looking gangrenous even after untwisting of pedicle. As there were no signs suggestive of revasucularisation (Figure 2) the conservation of ovary and fallopian tube was not possible and decision of right salpingo-oophorectomy was taken. Intraoperative and postoperative period was uneventful and patient was discharged home.

Figure 2: Ant surface of uterus and adnexal mass after untwisting

DISCUSSION

Adnexal torsion is the fifth most common cause of gynecologic surgical emergency, with a prevalence of 2.7%. (telinde book8th edition). Gynaecological ultrasonography is the imaging modality of choice (Pena *et al.,* 2000) but still preoperative diagnosis of ovarian torsion is confirmed in only 46% of patients (Bar *et al.,* 2010). The incidence of ovarian torsion among women of all ages is 5.9 per 1,00,000 women, majority of which present in reproductive age group(15-45years) that is 9.9 per lakh (Yuk *et al.,* 2015).

The different risk factors contributing this condition are pregnancy and puerperium, ovarian mass or cyst more than six cm, ovulation induction drugs, hypermobile adnexae and more length of ligaments. In our case ovarian cyst more than six cm could be the risk factor. The pathology of ovarian torsion is related to the initial circulatory stasis which is at first venous and lymphatic. The continued arterial perfusion of the ovary often leads to diffuse enlargement and edema of ovarian parenchyma and to follicular distension due to the transduation of fluid into the cyst and ultimately with time haemorrhagic infarction of the ovary occurs. Free intraperitoneal fluid is seen in most patients but in our case it was not there. Torsion of ovary usually occurs with torsion of the fallopian tube as well as their shared vascular pedicle around the broad ligament as it was in our case, although in rare caes the ovary rotates around the mesoovarium or the fallopian tube rotates around the mesosalpinx. In majority it is unilaterally with slight predominance with right due to presence of sigmoid colon on left side. In our case adnexal mass was on right side and was involving both fallopian tube and ovary.

In cases of adnexal torsion definitive diagnosis is often made in operating room (Tintinalli *et al.,* 2004). As investigations may not be accurate to diagnosis the condition. The main investigation being ultrasonograaphy. The ultrasonography sign suggestive of torsion of ovary are enlarged ovary, whirlpool sign of twisted vascular pedicle, uterus deviated to one side, free pelvic fluid in 80% cases (Weerakkody *et al.,*). Lack of ovarian blood flow on Doppler is good predictor of ovarian torsion with sensitivity of 44% and specificity of 92%. Positive and negative predictive values being 78% and71% respectively (Pena *et al.,* 2000). It indicates that there can be ovarian torsion in presence of normal ovarian flow as seen in our case. The use plasma D-Dimer level (cut off value 0.65mg/ml) in diagnosis of torsion has sensitivity and specificity of 71.4% and 85% respectively (Incebiy *et al.,* 2014). Preservation of ovary can be done in the form of untwisting of the pedicle and looking for revascularization of the adnexae.

In our case gangrenous changes in the ovary and tube were already present and revascularization was not seen even after untwisting of adnexae hence removal of adnexae was the only treatment of choice in an order to avoid complication like toxic shock syndrome and to save the paitent's life.

REFERENCES

Bar–on S, Mashiach R and Stockhein D *et al.,* (2010). Emergency laparoscopy for suspected ovarian torsion are we too hasty to operate?. *Fertility and Sterility* **93**(6) 2012-5, *doi:10.1016/fertnstert,2008,12,022 PMID 19159873.*

Incebiyi KA, Camuzcuoglu A, Hilali NG, Vural M and Camuzcuoglu H (2014). Plasma D dimer level in the diagnosis of adnexal torsion. *Journal of Maternal-fetal and Neonatal Medicine, 1-4doi:10.3109/14767058,2014.942636PMID 25007989.*

Pena JE, Ufberg D, Cooney N and Denis AL (2000). Usefulness of Doppler sonography in the diagnosis of ovarian torsion. *Fertility and Sterility* **73**(5) 1047-50, *Doi:10.1016/S0015-282(00)00487-8PMID10785237.*

Telinde's (No Date). *Operative Gynecology*, eighth edition, edited by John A Rock and John D Thompson 633.

Tintinalli Judith (2004). *Emergency Medicine* (McGrawHill) professional P 904 ISBN 978-0-07-138875-*7.*

Weerakkody, Yuranga and Dixon Andrew (No Date). *Ovariantorsion Radiopaedia.*

Yuk JS, Kim LY and Shin JY *et al.,* (2015). A national population based study of the incidence of adnexal torsion in the Republic of Korea. *International Journal of Gynecology & Obstetrics, doi:10.1016/jijgo.2014.11027 PMID 25721499.*