

**YOUNG GIRLS PRESENTING WITH TORSION OF OVARIAN CYSTS! DILEMMA IN
CONSERVING THE REPRODUCTIVE ORGANS****Dr. K. E. Karunakaran***

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ABSTRACT

Adnexal torsion is a Gynaecological emergency which would lead to removal of the ovary with its Fallopian tube which is significant especially in young girls. Untwisting or de-torsion is found to be safe however late presentation and delay in definitive treatment is still becoming a dilemma despite adequate facilities. Two cases of adnexal torsion are being analyzed and the pathetic situation of a young child ended up in salpingo oophorectomy is presented. It is concluded that Delays in obtaining the definitive therapy should be minimized; if possible avoided, by instituting a good deed of clinical awareness by the care providers, the use of imaging and the prompt involvement of Gynaecological team in the Emergency Unit shall be made mandatory. Delays in the cases with adnexal torsion would be avoided by all means in order to conserve the reproductive organs for their normal functions.

KEYWORDS: Adnexal torsion, untwisting, de-torsion, reproductive organs.**INTRODUCTION**

In females ovarian neoplasms occur at any age. Most often they are benign. Primary ovarian neoplasms are most commonly found in women aged 40–60 years.^[1] One of the complications of ovarian neoplasm is torsion often referred to as adnexal torsion and accounts for 3% of all Gynaecological emergencies.^[2]

Adnexal torsion is a significant emergency as this accounts for removal of diseased ovary, often with adjoining fallopian tube. Torsion of normal organs too occurs usually in a child or an adolescent who complains of a sudden onset of lower abdominal pain, can have a previous history of a similar pain,^[1] and 70 – 80 percent of adnexal torsion occurs during reproductive age group,^[2] indicate that young girls present with abdominal pain should be taken care of in order to conserve the ovary and the fallopian tube for fertility. In this aim, at surgery de- torsion or untwisting of adnexa is being practiced and reports reveal its safety.^[3,4,5] However, when the adnexal torsion is found necrotic and adhered with adjacent organs its surgical removal becomes unavoidable.

Thus when the patient presents early in acute stage, conserving the ovary with the fallopian tube is possible. This is demonstrated in the under mentioned cases presented to the Emergency Unit (EU) of Teaching Hospital Batticaloa, Sri Lanka (THB); one of whom had delay in having the ultimate care and ended up in the loss of an ovary with its tube.

Case 1: 19 years old student Miss K presented with sudden onset of pain in left iliac region of the abdomen of 2 days duration. She also had Nausea and vomiting twice. She was hemodynamically stable and had tenderness in the left iliac region. After initial evaluation at EU, she was admitted to surgical ward. She had significant tenderness in left iliac region. Ultrasonography after admission to surgical ward revealed a 9.8cm x 9.6 cm size mass in left iliac region with features favouring torsion. She was subsequently transferred to University Gynaecology unit.

Diagnosis of torsion of left ovarian cyst was made and the patient prepared for laboratory. During surgery it was found that the cyst with left ovary had undergone torsion. Minimal free fluid noted. The torsion was undone. Ovarian cystectomy was done and the ovary reconstructed. The other ovary, Fallopian tubes and uterus were normal. She made an uneventful recovery. At one year after surgery she was menstruating and no abdomino – pelvic lesions.

Case2: A 12 year- old girl Miss. F who attained menarche recently, had developed Lower abdominal pains of one-month duration. She had been receiving treatment at local hospital closer to her residence but without improvement.

She was ultimately admitted to EU of Teaching Hospital Batticaloa with nausea and vomiting along with persisting abdominal pain. She was referred to surgical

ward. On examination, she was hemodynamically stable with significant tenderness of abdomen, below the umbilicus. Ultrasonography revealed a mass on left iliac region and was then referred to university Gynaecology Unit.

A diagnosis of torsion of ovarian cyst was made and a Laparotomy was performed. Findings were; Uterus was anteverted, normal in size, Right ovary and Fallopian tube appeared normal. Torsion of left ovary with cyst and Fallopian tube which was gangrenous and adhered to the adjacent bowel were noted. She was subjected to Left sided salpingo oophorectomy (Picture). She made an uneventful recovery.



DISCUSSION

Identifying the etiology of acute pelvic pain in girls is often clinically challenging particularly in young girls.^[6] Ovarian torsion is a rare but emergency condition in women. Early diagnosis is necessary to preserve the function of the ovaries and tubes and prevent severe morbidity.^[7]

Nevertheless neoplasms of the ovary occurring at young age group are not uncommon. They often present with enlarged abdomen and mainly with lower abdominal pain. A survey conducted at THB had the evidence of 30% of ovarian neoplasm among the major Gynaecology surgery, from the Histopathology reports analyzed.^[8]

In clinical practice, abdominal pain occurring at young girls tend to be overlooked as in the second case who had significant period of abdominal pain and sought medical advice. Even if they get admitted to hospital delay occurs as they get admitted to surgical ward from the Emergency Unit. This happens despite the facilities such as ultrasonography is available in the hospital and be utilized in the out-patient setting. It should be emphasized that torsion of normal organs too can occur. The patient is usually a child or an adolescent and complains of a sudden onset of lower abdominal pain and can have a previous history of a similar pain.^[2] Therefore, abdominal pain in a child or young girl should

be taken care of since diagnosis of an ovarian torsion requires good clinical awareness with high index of clinical suspicion.^[9,10]

Ovarian torsion is a clinical emergency and also a rare but important cause of acute abdominal pain.^[7] Thus a prompt clinical assessment combined with ultrasonography become mandatory in young patients. Treatment is surgery. Torsion has traditionally been treated with oophorectomy because of the fear that untwisting the ovarian pedicle may result in a thrombotic embolus.^[4] However, no such cases were reported and untwisting the torsion has been found to be safe without increase risk of pelvic and systemic thrombo embolism and also prevents castration.^[4,5,11] It should be noted that complete arterial obstruction does not usually occur in adnexal torsion and ischaemic & haemorrhagic appearances are due to venous and lymphatic stasis rather than gangrene.^[12]

Therefore it could be concluded that abdominal pain in child and young girls should be taken seriously. Delays in obtaining the definitive therapy should be minimized; if possible avoided. A good deed of clinical awareness by the care providers in the out-patient settings and the use of imaging shall not be undermined. The involvement of Gynaecological team in the Emergency Unit shall be made mandatory. Delays in the cases with adnexal torsion would be avoided by all means in order to conserve the reproductive organs for their normal functions.

REFERENCES

1. Tumours of pelvic organs. In; Malhotra N, Kumar P, Mathothra J, Bora N M, Mittal P eds. *Jeffcoat's Principles of Gynaecology*, 2014; 279 -281.
2. Torrealday S, Rackow B W; Adnexal Torsion after IVF. In, Shariff K, Coomarasamy A eds, *Assisted Reproduction Techniques: Challenges & management options*. Wiley – Blackwell, 2011; 279 -281.
3. Khatri M A. Laparoscopic management of adnexal torsion. *Sri Lanka J of Obstetrics & Gynaecology*. 33(2): 56 –59. doi:http://doi.org/10.4038/sljog. v33i2. 4007.
4. Wagaman R, Williams RS. Conservative therapy for adnexal torsion. A case report. *J Reprod Med.*, 1990 Aug; 35(8): 833-4.
5. Cohen SB, Wattiez A, Seidman DS, Goldenberg M, Admon D, Mashlach S, Oelsner G. Laparoscopy versus laparotomy for detorsion and sparing of twisted ischemic adnexa. *J Society of Laparoendoscopic Surgeons (JLS)*, 2003; 7(4): 295-9.
6. Naffaa L, Deshmukh T, Tumu S, Johnson C, Boyd KP, Meyers AB. Imaging of Acute Pelvic Pain in Girls: Ovarian Torsion and Beyond *Curr Probl Diagn Radiol.*, 2017; 46(4): 317-329. doi: 10.1067/j.cpradiol.2016.12.010.

7. Ci Huang, Mun-Kun Hong, Dah-Ching Ding. A review of ovary torsion. *Tzu Chi Medical Journal*, 2017; 29[3]: 143 – 147.
8. Susil N, Uthayakumar E, Karunakaran K E. An audit on the Histopathological reports of the major surgery performed at Obstetrics and Gynecology unit (ward 3) of General Hospital (Teaching), Batticaloa. *Batticaloa Medical Journal*, 2007; 3: 32 -34.
9. Garg N, Krishna D, Rathor S, Rao K A. Ovarian Torsion: A Gynaecological Emergency. *Int. J Infertility and Fetal Medicine*, 2015; 6(3): 136 – 140.
10. Vijayalakshmi K, Reddy GM, Subbiah VN, Sathiya S, Arjun B. Clinico-pathological profile of adnexal torsion cases: a retrospective analysis from a tertiary care teaching hospital. *J Clin Diagn Res.*, 2014; 8(6): OC04-7. doi: 10.7860/JCDR/2014/8167.4456.
11. McGovern PG, Noah R, Koenigsberg R, Little AB. Adnexal torsion and pulmonary embolism: Case report and review of the literature, 1999; 54(9): 601-8.
12. Melson L. Ovarian cyst. In; Arulkumaran S, Regan L, Papageorghiou AT, Monga A, Farguharson DJM eds. *Oxford Desk Reference Obstetrics and Gynaecology*; Oxford University press, 2011; 610-611.