

# MANAGEMENT AND OUTCOMES OF OVARIAN TORSION: A RETROSPECTIVE ANALYSIS



Adams K<sup>1\*</sup>, Tanaka K<sup>1,2</sup>, Amoako A<sup>1,2</sup>, Khalil A<sup>1</sup>, Baartz D<sup>1</sup>.

1 Department of Obstetrics and Gynaecology, Royal Brisbane and Women's Hospital, Herston, Australia 2 Faculty of Medicine, University of Queensland, Herston, Australia

## Background

Ovarian torsion is an uncommon yet important gynaecological emergency, that can be a diagnostic dilemma<sup>1-4</sup>. Ovarian torsion occurs in women of all ages, with the highest incidence in those of reproductive age<sup>1,4</sup>. Twisting or torsion of the ovary around its vascular axis can result in reduced or absent blood flow to the ovary, with delay in diagnosis and treatment leading to ovary necrosis and death<sup>4</sup>.

# Results

Nausea and vomiting were present in 73.8% and 47.6% of patients respectively. An abdominal mass was palpable in 23.8% of women. Mean WCC was 10.5 x10<sup>9</sup>/L. All but one patient (97.6%) had an ultrasound prior to surgery.

Surgery consisted of 36 laparoscopic (85.7%) and 6 laparotomy (14.3%) cases. 27 women (64.3%) required oophorectomy. Ovarian detorsion with or without cystectomy, partial oopherectomy, and oophoroplexy were performed in 12 women (28.5%), 2 women (4.8%), and 1 woman (2.4%) respectively. The average length of stay was 3 days.

# Summary of time to presentation and theatre



■ Oopherectomy ■ No Oopherectomy ■ Average

# Conclusion

Ovarian torsion is a time critical emergency, and delay in presentation, diagnosis and time to surgery affects ovary survival. 64.3% of women required oopherectomy, following an average 40.5 hours of pain to presentation and 12 hours to surgery.

### Methods

Retrospective 5-year review of management and outcomes of women diagnosed with ovarian torsion at a tertiary care centre between January 2014 and December 2018.

#### **Results**

42 women were diagnosed with ovarian torsion during the study period. Their age ranged from 18 to 78 years (mean 37 years). 34 women (81.0%) were premenopausal and 8 women (19.0%) were postmenopausal. Women who required oophorectomy took 48 hours 44 minutes to present to the emergency department from the onset of symptoms and 15 hours and 35 minutes for triage time to surgery, compared to 28 hours 1 minute and 6 hours 33 minutes for those who did not require oophorectomy respectively.

### References

1. White M, Stella J. Ovarian torsion: 10-year perspective. *Emergency Medicine Australasia*. 2005;17(3):231-237.

2. Resapu P, Rao Gundabattula S, Bharathi Bayyarapu V, Pochiraju M, Surampudi K, Dasari S. Adnexal torsion in symptomatic women: a singlecentre retrospective study of diagnosis and management. *Journal of Obstetrics and Gynaecology.* 2019;39(3):349-354.

 Robertson JJ, Long B, Koyfman A. Myths in the evaluation and management of ovarian torsion. *The Journal of emergency medicine*. 2017;52(4):449-456.
Damigos E, Johns J, Ross J. An update on the diagnosis and management of ovarian torsion. *The Obstetrician & Gynaecologist*. 2012;14(4):229-236.

#### \*Contact: katherine-adams@live.com