

Effect of the first laparoscopy in an adolescent and young adult population and its association with chronic pelvic pain- a retrospective audit

Kavita Ravendran, Jinny Foo, Jason Chow, Kimberley Nguyen and Rebecca Deans

University of New South Wales, Sydney, Australia
Royal Hospital for Women, Sydney, Australia
The Children's Hospital at Westmead, Sydney, Australia
Correspondence: Dr. Kavita Ravendran kavita.ravendran@gmail.com



Background

Endometriosis is commonly diagnosed in adolescent and young adult patients (AYA) with chronic pelvic pain (CPP) on investigative laparoscopy. Many patients have recurrence of their pain, requiring repeat surgeries. This study aims to investigate any association between the age, operative findings at first surgery and total number of investigative laparoscopies for chronic pelvic pain in AYA patients.

Methods

We audited the medical records of 98 women under the age of 25, who presented with chronic pelvic pain to the Royal Hospital for Women gynaecology/endogynaecology service from 2013.

Data was analysed using Prism, descriptive statistics to describe mean and spread, Mann Whitney testing to evaluate non-parametric data sets and Fisher's exact testing to compare groups.

Results

There was no difference between age at first laparoscopy and number of laparoscopies ($p=0.809$).

Patients who underwent first laparoscopy prior to the clinic had **increased likelihood of repeat surgery**. 30/51 (58.8%) patients had 2 or more surgeries compared to 4/47 (8%) patients who underwent laparoscopy after the clinic ($p < 0.0001$).

Endometriosis was diagnosed in 64/98 (65%). Histopathological diagnosis differed between patients who underwent their first laparoscopy before presenting to the clinic and those who had their first laparoscopy afterwards (16/27 vs 30/37; $p=0.09$).

Secondary outcome

At the time of 1st consultation at CPP clinic 78/98 (79%) patients were using some form of pain medication. The most common medication class added to pre-existing regimes in the CPP clinic was neuropathic agents in 37/98 (37%) patients. Mood disorders were a symptomatic feature in 37/98 (37%) patients.

Combined anxiety and depression predominated in 14/98 (14%), depression alone in 19/98 (19%) and anxiety alone in 5/98 (5%).

Conclusion

A targeted approach to recommendation of laparoscopy in a CPP clinic lead to higher pickup of endometriosis and fewer diagnostic laparoscopies performed.

AYA patients with CPP should be reviewed at a tertiary centre prior to surgical investigation to ensure appropriate diagnosis, interventions and minimise unnecessary repeat laparoscopy.

References

1. Song A & Advincula, A. (2005) Adolescent Chronic Pain, *Journal of Pediatric and Adolescent Gynaecology*, 18: 371-377
2. Saridogan E. (2017) Adolescent endometriosis, *European Journal of Obstetrics and Gynaecology and Reproductive Biology*, 209: 46-49
3. Tandoi I, Somigliana E, Riparini J, Ronzoni S, Vigano P, & Candiani, M. (2011). High rate of endometriosis recurrence in young women. *J Pediatr Adolesc Gynecol*, 24(6), 376-379