

HOW EFFECTIVE IS LAPAROSCOPIC SURGERY IN THE TREATMENT OF ENDOMETRIOSIS-ASSOCIATED PAIN AND INFERTILITY?

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INTRODUCTION

Endometriosis can be defined as a chronic gynaecological condition which is characterised by the presence of endometrial tissue outside of the uterine cavity (1). Predominately, endometriosis affects women of reproductive-age.

Symptoms of endometriosis include dysmenorrhoea (pain during menstruation), non-cyclical pelvic pain, dyspareunia (painful intercourse), dyschezia (pain during defecation), urinary symptoms and infertility (3)(4).

To diagnose endometriosis, the gold standard treatment is laparoscopy and biopsy (5). Endometriosis can be treated both medically and surgically. In this project, I will focus on the use of surgery, in particular laparoscopic surgery, in treating endometriosis-associated pain and infertility.

METHOD

Patients were selected by a review of theatre records from 2016 for the gynaecology surgeons at University Hospital Wales. 126 patients who underwent laparoscopic surgery for endometriosis were identified. Patient notes were reviewed retrospectively to record and compare patient symptoms before and after laparoscopic surgery. Live birth rate was measured by monitoring patient attendance of antenatal clinic and delivery suite within 28 months of surgery using the Welsh Clinical Portal.

RESULTS

Primary outcomes

One hundred twenty-six patients (18 to 48 years of age) underwent laparoscopic surgery for endometriosis in the year 2016. One patient was lost to follow up as she moved to England after her surgery. Of the 125 patients, 56 patients saw a resolution of their symptoms post-surgery, 52 patients saw an improvement in their symptoms post-surgery and 16 patients saw that their symptoms were not resolved by laparoscopic surgery (Table 1). Sixty of the patients who had either a resolution or improvement of symptoms experienced a recurrence of their symptoms. The majority of patients (60%) saw their symptoms return less than 6 months after surgery (Table 2). Finally, of the 125 patients, 14 patients conceived within 18 months of surgery and 13 patients carried the pregnancies to term (Table 3).

Secondary Outcomes

Patients were also monitored for any surgical complications. Using patient notes, 10 patients (8%) were identified to have had complications during and/or after surgery (Table 4). The most common surgical complications were urinary retention (N=2) and bladder perforation (N=2).

Table 1

Outcomes of laparoscopic surgery for endometriosis

Criteria	Total number
Patients	125
Symptoms resolved post-surgery	56
Symptoms improved post-surgery	52
Symptoms unresolved	16
Symptoms returned*	60

*symptoms returned in patients who had resolution or improvement of symptoms

Table 2

Time for return of symptoms in patients who have experienced a resolution or improvement of symptoms after laparoscopic surgery for endometriosis

Return of symptoms (months)	Number of patients
≤6	36
7-12	7
13-18	6
19-24	7
≥25	4

Table 3

Fertility in patients who have had laparoscopic surgery for endometriosis

Criteria	Total number
Conceived	14
Carried to term*	13

* Of patients who conceived post-surgery

Table 4

Surgical complications (N=10)

Surgical complications	Number of patients
Surgical site infection	1
Urinary retention	2
Bladder perforation	2
Sepsis	1
Ureteric injury	1
Lung collapse	1
LRTI	1
Bowel perforation	1

CONCLUSION

This study confirms many patients who undergo laparoscopic surgery for endometriosis experience an improvement in symptoms or have resolution of their symptoms. Additionally, there is an increased conception and live birth rate after surgery, particularly up to 18 months post-surgery. Finally, the rate of surgical complications is in line with previous studies in endometriosis-associated pain and infertility.

REFERENCES

- Parasar P, Ozcan P, Terry K. Endometriosis: Epidemiology, Diagnosis and Clinical Management. Current Obstetrics and Gynecology Reports [Internet]. 2017 [cited 9 April 2019];6(1):34-41. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5737931/>
- Alimi Y, Iwanaga J, Loukas M, Tubbs R. The Clinical Anatomy of Endometriosis: A Review. Cureus [Internet]. 2018 [cited 10 April 2019]; Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6257623/>
- [Internet]. Nice.org.uk. 2019 [cited 10 April 2019]. Available from: <https://www.nice.org.uk/guidance/qs172/documents/briefing-paper>
- Farquhar C. Endometriosis. BMJ [Internet]. 2007 [cited 10 April 2019];334(7587):249-253. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1790744/>
- Recommendations | Endometriosis: diagnosis and management | Guidance | NICE [Internet]. Nice.org.uk. 2019 [cited 12 April 2019]. Available from: <https://www.nice.org.uk/guidance/ng73/chapter/Recommendations#diagnosis-endometriosis>