Audit comparing the effectiveness and safety of laparoscopic excision of deep rectovaginal endometriosis at the Endometriosis CaRe Oxford Endometriosis Centre, to the standards published by the BSGE multicentre prospective cohort study

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Setting:
Endometriosis CaRe Oxford Endometriosis Centre, Oxford University Hospitals NHS Foundation Trust

Objective
To prospectively audit the improvement of rectovaginal endometriosis excision by analysing the change in endometriosis pain scores for patients’ preoperatively and postoperatively. Also, to audit the incidence of urological complications incurred in excision of deep rectovaginal endometriosis.

Participants:
349 patients underwent planned excision of deep rectovaginal endometriosis.

Intervention:
Surgical excision of rectovaginal endometriosis is the proposed treatment in view of limited evidence supporting the long term use of medical therapies to control the symptoms of rectovaginal endometriosis. Laparoscopic excision of rectovaginal endometriosis performed involved dissection of pararectal space.

Data:
The database is generated from validated questionnaires given to women to assess their symptoms pre and post operatively. Moreover, surgeons complete a detailed questionnaire over the surgical findings and intervention performed.

Results

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>6 Months</th>
<th>12 Months</th>
<th>24 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premenstrual Pain*</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Menstrual Pain*</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Non-cyclical Pain*</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>EQ5D Pain*</td>
<td>2.07</td>
<td>1.80</td>
<td>1.76</td>
<td>1.73</td>
</tr>
</tbody>
</table>

*Median scores (3 point scale). †Median values (10 point scale).

Discussion
Pelvic deep infiltrative endometriosis affects 5% to 15% of women of reproductive age, it is a disabling disease on the rise. Rectosigmoid endometriosis may be the most severe form of endometriosis, and is considered stage 4 according to Kirchner’s classification.

Follow up of patients at 6, 12 and 24 months following laparoscopic excision of rectovaginal endometriosis showed there was significant reduction in premenstrual, menstrual, and non-cyclical pain scores. In addition, prevalence of pain and discomfort as a marker of Quality of Life based on EQ-5D 3 levels of severity questionnaire, shows a reduction in the prevalence of extreme pain from baseline. Whereas, the prevalence of “no pain” measure remained the same before and after surgery, which may reflect the limited benefit rectovaginal endometriosis excision in this asymptomatic population of patients.

A statistical comparison using (Mann-Whitney U test) of premenstrual, menstrual pain and non-cyclical pelvic pain showed that there was a statistically significant reduction in pre-menstrual, menstrual and non-cyclical pain symptoms that remained present for 2 years post surgery.

At Endometriosis Care Oxford, the cumulative incidence of urinary tract injury (Bladder injury: 0; Ureteric injury: 2; Urinary fistula: 0 Urinary leak:1) was 0.86% (3/348) whereas the reported urinary tract injury in the BSGE database was 1.0%.

Conclusions:
Premenstrual pain decreased from 7 prior to surgery, to 4 and 3 by 6 and 24 months, respectively. Menstrual pain was decreased to 5 at 6 months and maintained at 5 at 24 months. Non-cyclical pain had similarly decreased. The incidence of urinary tract injury was 0.86%, this is in keeping with the benchmark published by the BSGE cohort study.

References