RISK FACTORS FOR POST-OPERATIVE VOIDING DYSFUNCTION FOLLOWING PELVIC RECONSTRUCTIVE SURGERY

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Introduction

Short term voiding dysfunction in women undergoing pelvic reconstructive surgery varies from 5% to 40%(1,2). It results in increased catheter burden for the unit, catheter associated urinary tract infections (CAUTIs) and higher number of postoperative follow-up visits(3,4). Identifying women at risk will help in preoperative counselling and appropriate management in the postoperative period.

Aim

Identify risk factors for voiding dysfunction after pelvic reconstructive surgery.

Methods

It is a retrospective case-control study conducted in a tertiary urogynaecology centre in the UK. The study cohort included all women who underwent pelvic reconstructive surgery between March 2017 and March 2019 and postoperatively had a failed trial without catheter. Consecutive women on the surgical database with normal voiding postoperatively were included in the control group. Chi-squared test was used to calculate statistical significance.

Results

A total of 286 surgeries were performed. 46 women had postoperative voiding dysfunction. Three patients were excluded due to incomplete data. Baseline demographics were similar in both the groups. The incidence of postoperative voiding dysfunction following pelvic reconstructive surgery was 16.1% and none of our patients had long-term voiding problems. No significant difference was found in the mean intra-operative blood loss, anaesthetic duration and amount of intraoperative IV fluids in both groups.

<table>
<thead>
<tr>
<th>Risk factors</th>
<th>Study group (n=43)</th>
<th>Control group (n=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-morbidities(type 2 diabetes mellitus, stroke, cognitive dysfunction)</td>
<td>25.6%</td>
<td>7%</td>
</tr>
<tr>
<td>Medications(anticholinergics, antidepressants)</td>
<td>41.9%</td>
<td>14%</td>
</tr>
<tr>
<td>POPQ stage 3/4</td>
<td>69.8%</td>
<td>46.5%</td>
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</tbody>
</table>
Anterior repair 86.1% 74.4%
0.17

Posterior repair 76.7% 60.5%
0.10

Vaginal hysterectomy 39.5% 25.6%
0.17

Sacrospinous fixation 44.2% 23.3%
0.04

Postoperative opioid analgesia 60% 30%
0.00

(p-value: ≤ 0.05 statistically significant, > 0.05 not statistically significant)

Conclusion

Women with comorbidities, advanced pelvic organ prolapse and women undergoing sacrospinous fixation are more likely to have postoperative voiding dysfunction. Medications like anticholinergics, antidepressants and opioids also increase this risk.

References


