Bowel dysfunctions following hysterectomy

Marco Scaglia
Retrospective studies
Retrospective studies

- 6% of patients developed new symptoms (Carlson 1994)
- Constipation is more common in women after hysterectomy (Heaton 1993, Taylor 1989)
- 31% experienced a deterioration of constipation symptoms (Van Dam JH 1997)
Prospective studies
PRIOR ET AL. (1992)

200 PTS (BEFORE AND 6 MONTH AFTER)

- 22% WITH CONSTIPATION BEFORE OPERATION
- 60% IMPROVED AFTER OPERATION
- 20% INCREASED SYMPTOMATOLOGY
- 10% DEVELOPED NEW SYMPTOMS OF CONSTIPATION
HYSTERECTOMY DOES NOT CAUSE CONSTIPATION
(ROOVERS JP 2008)

- 344 PTS -3 YEARS FOLLOW UP
- 2% DEVELOPED CONSTIPATION
- 46% PERSISTED CONSTIPATION AFTER HYSTERECTOMY
Laparoscopic vs abdominal Hysterectomy
(Kluivers KB 2007)

- 38 patients in each group, 1 year follow up.

- No differences were found in defecatory distress inventory questionnaire.
COMPARE THE EFFECT OF VAGINAL AND ABDOMINAL HYSTERECTOMY (LAKERMAN 2011) (430 PTS PROSPECTIVE MULTICENTRIC 10 YEARS FOLLOW-UP)

☐ Defecation symptoms were more common after vaginal hysterectomy but this difference was not significant.

☐ 10 years after vaginal hysterectomy significantly more women had been treated for micturition symptoms.
Ano-rectal dysfunctions. Comparison between patients with and without hysterectomy
68 women with previous hysterectomy (mean age 68). 15 (6-26) yrs after surgery.

70 controls (mean age 63).
<table>
<thead>
<tr>
<th>Condition</th>
<th>Hysterectomy (n.68)</th>
<th>Controls (n.70)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perineal pain</td>
<td>12 (18%)</td>
<td>3 (4%)</td>
<td>p&lt;0.05</td>
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<tr>
<td>Fecal incontinence</td>
<td>18 (26%)</td>
<td>30 (44%)</td>
<td>p&lt;0.05</td>
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<tr>
<td>Evacuation difficulties</td>
<td>22 (32%)</td>
<td>25 (36%)</td>
<td>ns</td>
</tr>
<tr>
<td>Urinary incontinence</td>
<td>16 (30%)</td>
<td>15 (23%)</td>
<td>ns</td>
</tr>
<tr>
<td>Pelvic operations</td>
<td>Hysterectomy (n.68)</td>
<td>Controls (n.70)</td>
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<tr>
<td>Hemorrhoidectomy</td>
<td>54 %</td>
<td>66 %</td>
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<tr>
<td>Posterior pelvic repair</td>
<td>19 %</td>
<td>4 %</td>
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</tr>
<tr>
<td>Anterior pelvic repair</td>
<td>34 %</td>
<td>10 %</td>
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<tr>
<td>Ant-post pelvic repair</td>
<td>7 %</td>
<td>4 %</td>
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</tr>
<tr>
<td>Anal Sphincter repair</td>
<td>4 %</td>
<td>8 %</td>
<td></td>
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<tr>
<td>Burtch plastic</td>
<td>15 %</td>
<td>-</td>
<td></td>
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</tbody>
</table>
More antipertensive drugs

\[ p < 0.05 \]

- Use of antipertensives

- Hysterectomy

- Controls
CARDIOVASCULAR MORBIDITY AFTER HYSTERECTOMY  (LUOTO R 1995)

- Study performed on 3895 women in Finland.
- Women with hysterectomy and preservation of at least one ovary had significantly higher blood pressure and higher body mass index than those who had not undergone hysterectomy.
- The risk of other heart diseases (angina pectoris, myocardial infarction, and heart failure) were not significantly increased.
Anorectal physiology

Manometry
ANAL PRESSURES

![Graph showing anal pressures with and without hysterectomy. The x-axis represents different stages: MIN RAP, MAX RAP, RAP PRE, MSP, POST MSP. The y-axis represents mean pressure percent. The graph includes error bars for +/- 1.00 SE.](Image)
ANAL ENDURANCE

![Graph showing mean pressure percent over time for two groups: with and without hysterectomy. The graph includes error bars at 1.00 SE.](image)
MANOMETRIC CHARACTERIZATION OF RECTAL DYSFUNCTION FOLLOWING HYSTERECTOMY

- Distension needed to trigger rectal relaxation (cm H₂O)
- Rectal sensory threshold (cm H₂O)

<table>
<thead>
<tr>
<th></th>
<th>Hysterectomy</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distension</td>
<td>22.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Rectal Sensory</td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>
Manometric characterization of rectal dysfunction following radical hysterectomy.

15 pts with defecation difficulties after radical hysterectomy. Features seen included increased distension needed to trigger relaxation and decreased rectal sensation; This suggests disruption of the spinal reflex arcs controlling rectal emptying. External sphincters and resting internal sphincters were unchanged. (Barnes W 1991)
Ano-rectal dysfunctions after hysterectomy

- A simple vaginal hysterectomy has relatively modest effects on rectal sensory function, but pressure and volume thresholds for urgency were somewhat greater 1 year after hysterectomy. (19 women) (Bharucha AE 2012)

- Deficit of rectal sensory function, increase in compliance and volume. These findings suggest dysfunction in the autonomic innervation in some patients who had undergone hysterectomy. (14 women) (Smith AN 1990)
Conclusions

Many women with pre-existing gastrointestinal symptomatology improve after hysterectomy. However symptoms suggestive of irritable bowel syndrome with prevalent constipation do arise de novo in 2-15% of cases.

When performed for benign conditions hysterectomy has relatively scant effects on ano-rectal physiology.

Hypertension in connection with hysterectomy is a relatively unknown risk factor and scientists should deserve more attention to this problem.