LAPAROSCOPIC SURGERY FOR RECTOVAGINAL ENDOMETRIOSIS: IS IT SAFE?

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DEEP INFILTRATING ENDOMETRIOSIS

• > 5mm under peritoneal surface

• 5 – 12 % of cases of endometriosis

• Involvement of uterosacral ligaments, POD, rectovaginal septum
DEEP INFILTRATING ENDOMETRIOSIS

• Associated with debilitating symptoms:
  Dysmenorrhoea
  Dyspareunia
  Rectal symptoms

• Most severe form of the disease and most difficult to treat surgically
SURGICAL MANAGEMENT

- Shaving → superficial thickness excision, separating anterior rectal wall from loose CT and ablating endometrial lesion
- Discoid resection → resecting nodule and anterior rectal wall
- Segmental resection
OUR STUDY

AIM:
To determine the safety of laparoscopic surgery as a treatment option in the management of patients suffering from rectovaginal endometriosis
OUR STUDY

PRIMARY OUTCOME:
• Complications of surgery

SECONDARY OUTCOMES:
• Follow-up symptoms
• Pregnancy rates
METHODS

• Retrospective review

• Patients identified from surgical database – medical coding + individual case notes

• Telephonic / E-mail contact to obtain missing information

• Ethics approval from the Health Research Ethics Committee at Stellenbosch University (S11/11/036)
METHODS

Intervention:
• Laparoscopic surgery for rectovaginal endometriosis (Shaving and resection)

Setting:
• Vincent Pallotti Reproductive Medicine (referral centre)

Team:
• 2 gynaec laparoscopists +/- 1 colorectal surgeon
RESULTS

• 112 patients

• Mean age: 32.7 years.

• Nulliparas: 75.9%
RESULTS

• Previous procedures : 85,7%

• Prior medical treatment : 32,1%

• Follow-up : 3 months - 7 years

• Colostomy : 2 patients
PRESENTING SYMPTOMS

- Dysmenorrhoea : 93.8%
- Dyspareunia : 75%
- Infertility : 64.3%
- Dyschezia : 32.7%
RESULTS

Surgical technique used:

- Shaving: 97 (86.6%)
- Discoid resection: 3 (2.7%)
- Segmental resection: 13 (11.6%)
RESULTS

INTRA-OPERATIVE COMPLICATIONS: SHAVING

• Conversion to laparotomy : 0

• Blood transfusion : 0

• Ureteric injury : 0

• Breach of rectal mucosa : 1 (1%) → repaired at surgery
RESULTS

INTRA-OPERATIVE COMPLICATIONS: RESECTION

• Conversion to laparotomy: 1 (7.7%)

• Blood transfusion: 1 (7.7%)

• Ureteric injury: 0

• Breach of rectal mucosa: NA
RESULTS

POST-OPERATIVE COMPLICATIONS: SHAVING

• Rectovaginal fistula : 1 (1,0%)

• Vesicovaginal fistula : 0

• Ureteric injury: 1 (1,0%)

• Abscess : 1 (1,0%)

• Retention : 0
RESULTS
POST-OPERATIVE COMPLICATIONS: RESECTION

• Rectovaginal fistula : 2 (15.4%)

• Vesicovaginal fistula : 0

• Uretero-vaginal fistula: 0

• Abscess : 0

• Retention : 0
COMPLICATIONS

INTERNATIONAL LITERATURE:

Donnez → Shaving (3298 cases):
- 0.06%-1.3%

Meta-analysis → Rectal resection:
- 2-10%
RADICAL SURGERY INDICATIONS

- Mucosal infiltration
- Technical difficulty suturing injured bowel
- High sigmoid lesions
- Bowel lumen occlusion > 50%

Koninckx, Ussia, Adamyan, Wattiez, Donnez: “Strongly oppose bowel resection decided on before surgery, except in extensive occlusion of the sigmoid.”
SECONDARY OUTCOMES

Pelvic pain:
• Improvement: 67.7%
• Worsened: 3.1%

Dysmenorrheoa:
• Improvement: 67.7%
• Worsened: 3.1%

Dyspareunia:
• Improvement: 55.4%
• Worsened: 3.1%
SECONDARY OUTCOMES

PREGNANCY RATES:

• Desiring fertility: 72
• Pregnant: 39 (54.2%)
• Pregnancies: 49
  → 33 Spontaneous
  → 16 IVF
• Live births: 47
CONCLUSION

• Comparable results

• Experienced surgeons

• Counselling - inherent risks

• Shaving technique preferable - fewer complications

• Surgery should not be delayed when fertility is a concern
“That's all Folks!”
<table>
<thead>
<tr>
<th>Complication</th>
<th>Shaving technique (personal data), ( n=3,298 )</th>
<th>Rectal resection (meta-analysis) (Redwine and Wright [6], Chapron et al. [7], Daraï et al. [8, 42], Emmanuel and Davis [9], Fleisch et al. [10], Ford et al. [11]; Keckstein and Wiesinger [12]; Mereu et al. [13], Meuleman et al. [14, 15])</th>
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<tbody>
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<td>(&lt;0.1 %)</td>
<td>10 %</td>
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<td>Urinary retention</td>
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<td>Ureteral lesions (uroperitoneum)</td>
<td>0.3 %</td>
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<tr>
<td>Severe anastomotic stenosis</td>
<td>–</td>
<td>3 %</td>
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<tr>
<td>Sepsis (pelvic abscess)</td>
<td>0.03 %</td>
<td>2–4 %</td>
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<tr>
<td>Rectal perforation upon shaving (diagnosed and repaired during surgery, no further complications)</td>
<td>1.3 %</td>
<td>–</td>
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<td>Rectovaginal fistula</td>
<td>0.06 %</td>
<td>6–9 %</td>
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<td>Fecal peritonitis, anastomotic leakage</td>
<td>0.06 %</td>
<td>3–5 %</td>
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## COMPLICATIONS

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