Mr Roel Hompes MD
Consultant Colorectal Surgeon OUH

Oxford MasterClass 2013

PATHOGENESIS, PRACTICE AND PROSPECTS IN IBD
Table 4.2 Functional results of restorative proctocolectomy from 6 months to 6 years postoperatively in 389 patients.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Follow-up</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 months</td>
<td>1 year</td>
<td>2 years</td>
<td>3 years</td>
<td>4 years</td>
<td>5 years</td>
</tr>
<tr>
<td>No. of stools (mean ± SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daytime</td>
<td>5 ± 2</td>
<td>5 ± 3</td>
<td>6 ± 3</td>
<td>6 ± 2</td>
<td>6 ± 3</td>
<td>6 ± 2</td>
</tr>
<tr>
<td>Night-time</td>
<td>1 ± 1</td>
<td>1 ± 1</td>
<td>2 ± 2</td>
<td>2 ± 1</td>
<td>1 ± 1</td>
<td>2 ± 1</td>
</tr>
<tr>
<td>Able to discriminate gas from stool (% of patients)</td>
<td>69</td>
<td>77</td>
<td>73</td>
<td>84</td>
<td>77</td>
<td>86</td>
</tr>
<tr>
<td>Lomotil (% of patients)</td>
<td>26</td>
<td>19</td>
<td>17</td>
<td>25</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Metamucil (% of patients)</td>
<td>43</td>
<td>36</td>
<td>40</td>
<td>38</td>
<td>30</td>
<td>27</td>
</tr>
</tbody>
</table>

From Pemberton JH (1992) with permission.
20% of pouches behaves badly

- Upstream
- Small bowel
- Within the pouch
- Pouch outlet
Pouch Dysfunction

Karoui et al. DCR 2004

Cumulated risk of pouch removal (%)

Time from pouch formation (in years)

Patients at risk

<table>
<thead>
<tr>
<th></th>
<th>634</th>
<th>358</th>
<th>178</th>
<th>52</th>
</tr>
</thead>
</table>

Karoui et al. DCR 2004
## Pouch Dysfunction

<table>
<thead>
<tr>
<th></th>
<th>St Mark’s n=996</th>
<th>Referred n=245</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No patients</td>
<td>58 (5.6%)</td>
<td>10 (4%)</td>
<td>68</td>
</tr>
<tr>
<td>Pelvic sepsis</td>
<td>28</td>
<td>5</td>
<td>33 (48.5%)</td>
</tr>
<tr>
<td>Pouch fistula</td>
<td>24</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Crohns</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Poor function</td>
<td>21</td>
<td>3</td>
<td>24 (35.2%)</td>
</tr>
<tr>
<td>Pouchitis</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>other</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Oxford experience (2009)

498 IPAA
30 Pouch excisions, 7 immediate
27 in house
3 elsewhere
Oxford experience (2009)

Reasons for excision

- 8 pouchitis
- 6 ischaemia
- 6 sepsis
- 5 Crohn's
- 3 incontinence
- 1 bleeding
- 1 desmoid

Years after pouch construction:

- 1 year: 7
- 2 years: 3
- 3 years: 3
- 4 years: 4
- 5 years: 1
- 6 years: 1
- 7 years: 1
- 8 years: 1
- 9 years: 1
- 10 years: 1
- <20 years: 1
Dysfunction of the ileal pouch

Pouch dysfunction
Dysfunction of the ileal pouch

(in the pouch)

(Above the pouch)

(Below the pouch)

(the pouch)
Dysfunction of the ileal pouch

- Pouchitis (in the pouch)
- Problems with ileal pouch outlet (Below the pouch)
- Problems with the small bowel (Above the pouch)
- Structural pouch problems (the pouch)
Pouchitis

2/52 metronidazole or ciprofloxacin

Good response

Recurrent episodes

Repeat Tx with AB

Commence probiotics such as VSL3
Pouchitis

2/52 metronidazole or ciprofloxacin

Poor response

Change AB

Good response

Poor response
Pouchitis

2/52 metronidazole or ciprofloxacin

Poor response to AB

Combination or cyclic AB
Topical Rx with 5-ASA / Steroids
Self intubation with irrigation

Good response
No improvement

Defunctioning ileostomy

Good response
Poor response

Consider ileostomy reversal
Consider Pouch excision
Structural dysfunction

Structural problems with the pouch
Ileal pouch rectostomy
- Revisional surgery
  - Transabdominal: new IPAA
  - Transanal: mobile pouch on DRE

Long efferent limb / afferent loop syndrome
- Revisional surgery
  - Revisional surgery: excision of pouch & new IPAA

Small Pouch Volume
- Revisional surgery: excision of pouch & new IPAA

Twisted Pouch
- Excise and re-do pouch
  - Good response
  - Poor response: Consider ileostomy or pouch excision

Crohns Disease within Pouch
- Aggressive Medical MX
  - Good response
  - Poor response

Structural dysfunction

Sagar et al. BJS 2012
Pouch Dysfunction
Structural problems with the pouch

Ileal pouch rectostomy

Revisional surgery

Long efferent limb / afferent loop syndrome

Revisional surgery

Small Pouch Volume

Revisional surgery: excision of pouch & new IPAA

Twisted Pouch

Excise and re-do pouch

Crohns Disease within Pouch

Aggressive Medical MX

Good response

Poor response

Consider ileostomy or pouch excision

Transabdominal: new IPAA

Transanal: mobile pouch on DRE

Sagar et al. BJS 2012
Outlet dysfunction

Problems with the outlet of the pouch
Outlet dysfunction

Problems with the outlet of the pouch

- Stenosis
  - Clean, avoid soap, dry with hairdryer, Zn based paste
  - Dilatation with Hegar dilators
    - Good response
    - Recurrence
      - Consider self dilatation

- Perianal excoriation

- Cuffitis
  - Topical 5-ASA / steroids Mucosectomy +/- PA
  - Loperamide bulking agents diet

- FI
  - Lay open Seton / Plug AF

- Anal fistula
  - Button plug Formal repair

- Pouch vaginal fistula

- Paradoxal puborectalis contraction
  - Prolapse
    - BFB
    - Botox injection
    - Pouch Pexy

Sagar et al. BJS 2012
Problems with the small bowel
Problems with the small bowel

- Pre-pouch Inflammation
  - Exclude Crohn’s disease
    - Oral 5-ASA / Steroids
      - Consider anti-TNF
- Stenosis at the site of ileostomy or adhesional obstruction
- Celiac
  - Bacterial overgrowth
- Irritable Pouch / Bowel
  - Refer to physician with interest in functional bowel disorders

Sagar et al. BJS 2012
Assessment of Poor pouch function

• History of poor function
  – Always bad
  – Recent deterioration

• Review histology

• Review peri-operative course

• Clinical examination

• PR

• Pouchoscopy + biopsy
Assessment of Poor pouch function

• Inside
  – Flexible pouchoscopy + biopsy

• Outside
  – CT or MR pelvis

• Below
  – Sphincter physiology and ultrasound
  – Pouchogram
  – Defaecating pouchogram
  – EUA, pouch and cuff biopsies

• Above
  – Small bowel enema
Pouch Dysfunction

- “Normal/tolerable” function varies considerably
- Not all pouch dysfunction is pouchitis
- Problems may not just be within the pouch
- Sepsis is commonest factor leading to failure
- Consider salvage before excision
- Kock pouch may have a future!
Kock Pouch

Kock Pouch
Pouch Dysfunction

Shit Happens