Function problems after rectal cancer surgery

Terry Phang

St. Paul’s Hospital
University of British Columbia
Low Anterior Resection Syndrome

- Loss of rectal reservoir
- Injury to pelvic autonomic nerves
Questions

• What percentage of rectal cancer patients have fecal incontinence after preop radiation and low anterior resection?

• What percentage of rectal cancer patients expect to have worsened anorectal function after treatments?

• What percentage of rectal cancer patients remember any discussion of anorectal function disturbances from preop consultation and consenting?
Rectal Functionality – After radiation

- After pelvic radiation at 1 yr (eg. GU cancer)
  - #BM’s/day: 2
  - Urgency: 50%
  - Clustering: 40%
  - Fecal incontinence: 20%

Rectal Functionality – After TME

• After rectal cancer surgery at 1 yr (no rad)
  – #BM’s/day: 3-4
  – Urgency: 90%
  – Clustering: 84%
  – Fecal incontinence: 46%

Effect of TME + Radiation SPH 1999-2004

Fecal incontinence scores

<table>
<thead>
<tr>
<th></th>
<th>NO RAD</th>
<th>RAD, 25GY</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>No. Daily BMs</td>
<td>2-3</td>
<td>3-4</td>
</tr>
<tr>
<td>Gas</td>
<td>70%</td>
<td>83%</td>
</tr>
<tr>
<td>Mucus</td>
<td>20%</td>
<td>46%</td>
</tr>
<tr>
<td>Liquid Stool</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Solid Stool</td>
<td>30%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Rectal Functionality – After Rad + TME

• After rad + rectal cancer surgery at 5 yr
  – #BM’s/day: 3-4
  – Fecal incontinence: 62%

  • 14% severe

Peeters K et al, J Clin Oncol 2005, 23: 6199
Rectal Functionality – After Rad + TME + ISR / coloanal

- #BM’s/day: 2-3

- After rad + rectal cancer surgery at 5 yr
  - Fecal incontinence: 59%
    - 24% severe

- *No patient requested colostomy*
Urinary Functionality

- Urinary incontinence after rectal cancer surgery at 5 yr
  - No radiation: 39%
  - Radiation: 39%

Peeters K et al, J Clin Oncol 2005, 23: 6199
Sexual Functionality

• Sexual activity decreased after rectal cancer surgery:
  – Preop male and female: 80%
  – Postop male: 50%
  – Postop female: 32%

• Postop sexual problems
  – Male: libido 47%, impotence 32%, orgasm 41%
  – Female: libido 41%, lubrication 56%, orgasm 35%

Functionality – Summary

- After radiation and LAR
  - 39% urinary incontinence
  - 40% sexual dysfunction
  - 60% fecal incontinence
### Patient Expectations on Function

<table>
<thead>
<tr>
<th>Function</th>
<th>Worse</th>
<th>Same or Better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowel</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>Bladder</td>
<td>12%</td>
<td>88%</td>
</tr>
<tr>
<td>Sexual</td>
<td>18%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Temple et al, MSKCC
Patient satisfaction

• After TME at 5 yrs
  – LAR satisfaction:
    • Non-radiated: 60%
    • Radiated: 50%
  – Stoma satisfaction: 75%

Peeters K et al, J Clin Oncol 2005, 23: 6199
Patient satisfaction higher for stoma than LAR

• Is poor satisfaction with LAR bowel function due to incontinence and decreased quality of life?

• *Is poor satisfaction with bowel function after LAR due to insufficient preop counseling?*
SPH rectal cancer treatments QOL at 1 year:

Mean functional scores of patients with rectal cancer measured by EORTC QLQ-C30. A higher score represents a higher level of functioning or global health status/QOL.

Mean QOL scores of rectal cancer patients measured by EORTC QLQ-C38

Values in the functional scales range from 0 (worst outcome) to 100 (best outcome).

Values in the symptom scales range from 0 (no symptoms) to 100 (most symptoms).
Curative Rectal Cancer Treatments

• Global quality of life unchanged

• Emotional functioning and future perspective improved at 1 year
Myth of informed consent in rectal cancer surgery: What do patients retain?

- 30 patients, 2009-2010
- 47% did not recall preop discussion of risks to bowel function
- 57% did not recall preop discussion of risks to urinary function
- 47% did not recall preop discussion of risks to sexual function

Scheer, DCR 2012; 55: 970
Patient expectations of post-treatment bowel function, 65% same or improved:

- **UNREALISTIC**!
- Need to improve patient satisfaction after radiation + LAR
- *Better patient counseling and education required*
Questions

• What percentage of rectal cancer patients have fecal incontinence after preop radiation and low anterior resection? **60%**

• What percentage of rectal cancer patients expect to have worsened anorectal function after treatments? **35%**

• What percentage of rectal cancer patients remember any discussion of anorectal function disturbances from preop consultation and consenting? **50%**
Functionality – Take home

• After radiation and LAR
  – 60% fecal incontinence

• Patients have overly optimistic expectations of post-treatment function

• *Improved patient education required*