Multicentre cohort study of short course preoperative radiotherapy (SCPRT) and delayed Transanal Endoscopic Microsurgery (TEMS) in frail patients with early stage rectal cancer

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No conflicts of interest
What is the benchmark for T1 and T2?

Standard surgery +/- radiotherapy

TEM

Radiotherapy +/- TEM
SCPRT and TEMS cohort study
Manchester, Chichester, Bradford and Birmingham

☐ 5 centres
☐ 63 patients (2007-2012)
☐ median age 75 (range 51-94)
☐ Staged > T3 (MRI and ERUS)
Typical pathology
Complete clinical/pathological response

uT2

10 weeks

pCR
## SCPRT and TEMS results

<table>
<thead>
<tr>
<th></th>
<th>pCR</th>
<th>ypT1</th>
<th>ypT2</th>
<th>ypT3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>20</td>
<td>23</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td><strong>%</strong></td>
<td>32%</td>
<td>36%</td>
<td>30%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>R1</strong></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Local recurrence</strong></td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td><strong>Distant recurrence</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean follow up m (range)</strong></td>
<td>24</td>
<td>12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

(2-48) (5-30) (1-48)
## COMPLICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Acute (%)</th>
<th>Chronic (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiotherapy proctitis</td>
<td>4.8</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>SURGICAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suture line dehiscence</td>
<td>12.7</td>
<td></td>
</tr>
<tr>
<td>Soiling, urgency, diarrhoea</td>
<td>19.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Rectal Pain</td>
<td>4.8</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>MEDICAL</strong></td>
<td></td>
<td></td>
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<tr>
<td>MI</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Confusion</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total (% of patients)</strong></td>
<td>33.3</td>
<td>7.9</td>
</tr>
</tbody>
</table>
COMPLICATIONS

SUTURE LINE DEHISCENCE
12.7%

AT 1 YEAR
LOCAL Recurrence

- Site
  - Lymph nodes – 1/4 N+
  - Lumen – 4/4 luminal recurrence

- Risk factors
  - 4/4 T2 i.e. no radiotherapy response
  - 2/4 also poorly differentiated
SURVIVAL

- 52 (82.5%) patients alive.
- 48 (76.2%) alive + disease free

- 11 deaths
  - 7 not disease related
  - 4 disease related
    - 1 TEM mortality (ASA 4)
    - 1 cardiac event after successful salvage surgery
Conclusions

- Safe in frail, elderly population
- $\frac{1}{3}$ pCR + $\frac{1}{3}$ ypT1 = satisfactory response
- $\frac{1}{3}$ no response
- Local recurrence predictable
  - lack of response
  - presence of an additional adverse feature