Does Physiotherapy Have A Role In The Management Of Continence Problems For Men Living With And Beyond Prostate Cancer?

Belfast Health and Social Care Trust

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The Project

- An innovative physiotherapy service model
- To provide pre-habilitation and rehabilitation for prostate cancer patients undergoing treatment or post treatment.

The aim:
- to enhance recovery by proactively reducing symptoms and improving quality of life.
- Increase opportunity for a more active and healthy lifestyle with associated benefits
- Improve economic impact for patients enabling return to employment
- Improve social and emotional well-being and a degree of potential intimacy

How the project was delivered

- Pre-habilitation programme
  - assessment of bladder, bowel and sexual function
  - digital rectal examination (DRE)
  - a bespoke exercise programme
  - additional advice on diet, fluids and activity levels

- Rehabilitation programme
  - an intensive 1:1 physiotherapy service post-op/ post-radiotherapy follow-up service.
Referrals 232 (up to 30/01/17)

Patient Groups

- Pink group - men seen pre and post op - 52%
- Green group - men seen only post-op - 25%
- Blue group - "historical" - men seen >3 months post surgery or post other treatment - 23%

Age Range of Referrals Received (232)

<table>
<thead>
<tr>
<th>Age Range</th>
<th>&lt;= 49 yrs.</th>
<th>50-59 yrs.</th>
<th>60-69 yrs.</th>
<th>70-79 yrs.</th>
<th>80+ yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>9%</td>
<td>36%</td>
<td>45%</td>
<td>9%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Outcomes

- 79% of men referred gave consent to DRE
  - 58% needed instruction to improve their pelvic floor muscle technique.
  - Of which 84% were able to improve technique

Reasons for poor technique
- Limited endurance
- Poor range
- Asymmetry
- Over activity
- Accessory muscle use
- Poor awareness

Outcomes Measures

- ICIQ-UI: International Consultation on Incontinence Questionnaire Short Form
  - 0 – 31. The optimal score = 0
- I-PSS: International Prostate Symptom Score and Quality of Life.
  - 1-7 mild; 8-19 moderate; 20-35 severe
- EQ5D: general quality of life measure
  - 100% perceived as perfect health - 0% worst health

Patient Evaluation/Feedback
### Pre-op

<table>
<thead>
<tr>
<th></th>
<th>Pre-op N=101</th>
<th>1 month post op N=76</th>
<th>Post Physio Intervention N=52</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQSD Av Range</td>
<td>74% 20-100%</td>
<td>70% 15-100%</td>
<td>84% 40-100%</td>
</tr>
<tr>
<td>IPSS Av Range</td>
<td>1.7 0.33</td>
<td>7.3 0.32</td>
<td>4.8 0.28</td>
</tr>
<tr>
<td>ICIQ Av Range</td>
<td>1.4 0-14</td>
<td>10.2 0-21</td>
<td>4.5 0-14</td>
</tr>
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</table>

### < 3 months Post-op

<table>
<thead>
<tr>
<th></th>
<th>On assessment N=51</th>
<th>Post Physiotherapy Intervention N=30</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQSD Av Range</td>
<td>71% 20-100%</td>
<td>86% 40-100%</td>
</tr>
<tr>
<td>IPSS Av Range</td>
<td>9.3 0-35</td>
<td>3.5 0-13</td>
</tr>
<tr>
<td>ICIQ Av Range</td>
<td>10.5 0-21</td>
<td>5.1 0-14</td>
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### Historical

<table>
<thead>
<tr>
<th></th>
<th>On Assessment N=41</th>
<th>Post Physio Intervention N=20</th>
</tr>
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<tbody>
<tr>
<td>EQSD Av Range</td>
<td>68% 18-100%</td>
<td>78%</td>
</tr>
<tr>
<td>(1 person scored 25-remainder 0 or above)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPSS Av Range</td>
<td>9.3 0-32</td>
<td>4.4</td>
</tr>
<tr>
<td>(1 person scored 28-remainder scored 10 or less)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICIQ Av Range</td>
<td>8.6 0-21</td>
<td>3.7</td>
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### ICIQ

<table>
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<tr>
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<th>Pre-op</th>
<th>Post op / 1st Appt</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td></td>
<td>1.4</td>
<td>10.2</td>
<td>4.5</td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td></td>
<td>10.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td>8.6</td>
<td>3.7</td>
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ICIQ - Incontinence Bothersome Score
0 - not at all; 10 - a great deal

Pre-op | Post-op | 1st | After Physio | Intervention
--- | --- | --- | --- | ---

IPSS
1-7 mild; 8-19 moderate; 20-35 severe

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IPSS - QOL due to urinary symptoms
0 - delighted; 1 - pleased; 2 - mostly satisfied; 3 - mixed; 4 - mostly dissatisfied; 5 - unhappy; 6 - terrible

Pre-op | Post-op | 1st | After Physio | Intervention
--- | --- | --- | --- | ---

Feedback:
- "I was monitored and knew what level to exercise. Reading a pamphlet is only good to a low level. Having a physio check and correct any shortfall was very necessary."
- "100% useful. Plugs have changed my life"
- "The expert advice on how to do pelvic floor exercises including use of computerised graphics - I found the service invaluable"
Lessons learnt: Opportunities

- practice innovation
- leadership development
- working in partnership
- enhanced multidisciplinary working
- service improvement and business planning
- easily transferrable to other urology oncology teams throughout the UK as physiotherapy skilled staff are already available who could replicate the service

Lessons learnt: Barriers

- the lack of knowledge of the benefits of effective and efficient physiotherapy
- communication pathways
- funding remains a barrier to all new developments, and a creative approach to exploring different sources is required.

Next steps

- On-going audit
- Regular feedback to funding bodies and commissioner
- Sharing the knowledge and experience gained
- On-going funding
- More health and well being events re: prevention of bladder/bowel problems to those on active surveillance/watchful wait
- Widening pilot to address men with prostate cancer routinely accessing oncology services
- Further expansion to incorporate patients suffering gastrointestinal/bladder consequences as a result of pelvic radiation/surgery in all pelvic tumour groups; again a key national cancer objective.

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