Radiotherapy for Stage I-II Testicular Seminoma: A Prospective Evaluation of Short-term Effects on Body Image and Sexual Function

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Introduction

Incidence

- Testicular Cancer (TC): 1-2% of male cancers
- About 60% consists of testicular seminoma
- Mostly young men (18-70 yrs)

Treatment

- Primary: Inguinal orchiectomy
- Adjuvant: Inphradiaphragmatic radiotherapy (Stage I-II)
Sexual Function and TC

- Sexual complaints are common (1-3)
- Body image can be impaired after treatment (4)
- Published data refer to long-term effects of treatment, with no reports on short-term effects

4. Incrocci et al. IJROBP 2002;53:1165-73
Objectives

To evaluate the short-term effects of orchiectomy and radiotherapy on body image and sexual function in patients with testicular seminoma
Methods

- N=161 patients, median 36 (range 18-70) yrs, treated between 1999-2013
- Dutch questionnaire on sexual function and body image
- Prospective assessment:
  - Baseline, after orchiectomy (n=161)
  - 3 mos after radiotherapy (n=133)
  - 6 mos after radiotherapy (n=120)
Results

- 61% reported changes in body image
- 19% were concerned about undressing in presence of others
- 13% reported problems during sexual contacts with partner
- 48% expressed fertility concerns

- Age correlates with fertility concerns, problems with undressing, and sexual contacts
Results (cont’d)

- Reduction of fully rigid erections at 6 mos (33% → 25%)
- One forth reported reduction in sexual interest, activity, and pleasure, with no significant difference between 3 and 6 mos
- Impaired body image was significantly associated with a decrease in sexual interest, pleasure and erectile function
- 45% reported adverse effects on sexual life, though the percentage of sexually active patients remained the same (90%)
# Results

## Sexual interest, activity and pleasure at 3 (n=133) and 6 months (n=120) after radiotherapy (questionnaire B and C respectively)

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>B</th>
<th>C</th>
<th>B</th>
<th>C</th>
<th>B</th>
<th>C</th>
<th>B</th>
<th>C</th>
<th>B</th>
<th>C</th>
<th>P-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since radiotherapy, is your sexual interest different than before?</td>
<td>(A little) more</td>
<td>The same</td>
<td>A little less</td>
<td>Quite a bit less</td>
<td>Very much less</td>
<td>3%</td>
<td>5%</td>
<td>69%</td>
<td>72%</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>Since radiotherapy, is your sexual activity different than before?</td>
<td>3%</td>
<td>4%</td>
<td>68%</td>
<td>73%</td>
<td>19%</td>
<td>13%</td>
<td>7%</td>
<td>8%</td>
<td>3%</td>
<td>2%</td>
<td>0.126</td>
</tr>
<tr>
<td>Since radiotherapy, is your sexual pleasure different than before?</td>
<td>3%</td>
<td>5%</td>
<td>77%</td>
<td>73%</td>
<td>14%</td>
<td>14%</td>
<td>2%</td>
<td>7%</td>
<td>4%</td>
<td>2%</td>
<td>0.846</td>
</tr>
</tbody>
</table>

*Wilcoxon signed rank test between questionnaire B and C*
Conclusions

- Patients treated for testicular seminoma experience changes in body image, sexual interest, activity, and pleasure.
- Erectile rigidity was significantly reduced after 6 months.
- Impaired body image was significantly associated with decrease in sexual interest, pleasure and erectile function.
Take Home Message

Address body image and sexual function at an early stage in order to offer treatment or counselling if necessary.

Thank you