Work status after radical prostatectomy among men aged < 65 years

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Background I

- In Norway the annual average number of men ≤64 diagnosed with Prostate Cancer (PCa) between 2005 to 2009 was 1,260. This is an increase from 12% of all new PCa diagnoses to 28% during the last 2 decades.

- Approximately 80% of them are expected to be active in the workforce.

- Radical prostatectomy (RP) is usually performed as curative treatment in patients with localized tumors, who have a life expectancy of ≥10 years.

- In Norway patients are prescribed a 4-6 weeks sick leave after RP.
Do they regain their pre-operative work status?

- during the 4-6 prescribed weeks?
- at 3 months?
- at 1 year?

What factors affect return to work?
Regarding work, is there a better outcome after RALP than ORRP?
Background II

- RP is performed as either an

  open retropubic prostatectomy – ORRP
  or a
  robot-assisted radical prostatectomy – RALP

- Fewer peri-operative complications are associated with RALP*

- The direct costs of RALP are much higher than for ORRP

Previous research

• To our knowledge, only one former study on post-RP work status:

  Register based Swedish-Danish study of 274 working men <64

  Result: Median sick leave duration

  - RALP: 11 days (0-355)
  - ORRP: 49 days (0-365)

• Patients treated with RALP, were twice as likely to return to work at any time during the one year follow up.

Patients and Methods

• Source: The NUCG VII/”PROLIV” Study; National, prospective study on patients eligible for curative treatment, regarding adverse-effects.

• Questionnaire pretreatment, at 3 months and 12 months.
Patients and Methods

• Eligible patients for this paper:
  – <65 years, operated with RALP or ORRP.
  – working full time or part time at baseline (N=282)
  – Respondents to questions concerning work status at 3 months and 12 months.

• Subgroup study (Recall at 12 months)
  – Study on duration of immediate post-RP sick leave among patients working full time pretreatment.
Questionnaire

At all time points:
• Work-status
• EPIC-26 (urinary, sexual, bowel dysfunction)
• Fatigue Questionnaire
• Co-morbidity
• Short Form 12 (Quality of life)

Only at baseline:
• Socio-demographics
• Neuroticism (EPQ-18) - short form
• Self-esteem (Rosenberg) - short form
Definition of work status changes compared to pretreatment

- **Stable**: Same work status category
- **Improved**: Part time → Full time
- **Declined**: Full time → Part time or sick leave, Part time → sick leave, Left the workforce
## Results I – Pretreatment (N = 264) characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age</td>
<td>60.2 (44.4-64.8) years</td>
</tr>
<tr>
<td>Working full time</td>
<td>239 (91%)</td>
</tr>
<tr>
<td>Working part time</td>
<td>25 (9%)</td>
</tr>
<tr>
<td>RALP</td>
<td>72%</td>
</tr>
<tr>
<td>ORRP</td>
<td>28%</td>
</tr>
<tr>
<td>One co-morbid illness</td>
<td>23%</td>
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<tr>
<td>Years of education</td>
<td></td>
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<tr>
<td>&lt;13 years</td>
<td>41%</td>
</tr>
<tr>
<td>≥13 years</td>
<td>59%</td>
</tr>
<tr>
<td>Paired relationships</td>
<td>96%</td>
</tr>
</tbody>
</table>
Results II – 3 months follow-up (N=264)

• Stable or improved work status 192 (72%)

• Declined work status 72 (23%)

• *Declined* work status was significantly associated with urinary dysfunction and bother related to this, lower QoL and fatigue in univariate analyses.

• RALP did not favor stable or improved work status at 3 months over ORRP.
Results III – Multivariate regression

- Urinary leakage and bother were not significantly associated with declined work status

- Both lower mental and physical QoL were significantly associated with declined work status
Results – 12 months (N=232)

- Stable or improved work status according to baseline $\quad N=195 (84\%)$
- Declined work status according to baseline $\quad N=37 (16\%)$
- Older age and lower physical QoL were significantly associated with declined work status at 12 months follow-up in multivariate regression analysis.
Results – subgroup analysis (N=190)

- 76 % treated with RALP
  26 % treated with ORRP

- Duration of sick leave post RP:
  1-6 weeks: 111 (58%)
  > 6 weeks: 79 (42%)

- There was no association with RALP vs. ORRP

- Prolonged sick leave was associated with low age and high physical workload in multivariate regression analysis.
Changes - work status

Pre-treatment

- 0%
- 20%
- 40%
- 60%
- 80%
- 100%

3 months

- Left
- Sick leave

- Parttime
- Fulltime

12 months
Conclusions

• Workforce participation can be affected the first year following prostatectomy, and patients should be informed about this in pre-operative counselling.

• Reduced, or altered workforce participation, should be considered an adverse effect of RP

• We found no association between work status and surgical method in Norwegian patients.
Collaborators

Thanks to my collaborators on this project:

- Professor Sophie D. Fosså
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- Ph.D-fellow Andreas Steinsvik