

## Parameters important for patients recovery undergoing radical retropubic prostatectomy

Gruschy L, Nielsen ST, Andersen M. Department of Urology, Rigshospitalet, University of Copenhagen Denmark.

### Objectives:

Patients undergoing radical retropubic prostatectomy (RRP) often experience temporary as well as longer lasting urinary incontinence following surgery. This has implications for quality of life. Urinary incontinence may be assessed by questionnaires and pad testing. The aim of this study was to evaluate the time to regain continence following surgery and compare the results of questionnaires and pad testing, respectively, in the assessment of urinary incontinence. Furthermore we wanted to identify parameters important for patient recovery

### Material and methods

50 patients undergoing RRP in the Department of Urology, Rigshospitalet, were invited to participate in the study.

Preoperatively, patients recorded their height/weight, normal physical activity, educational level, employment status, and lifestyle related factors i.e. smoking and drinking habits.

Patients filled in questionnaires recording the time to regain normal physical and social capabilities, and urinary continence at 4, 6, 8, 10 and 12 weeks following surgery. The questionnaires covered 6 domains, domestic work, gardening, social activities, working capability, and physical activity. Each domain scored individually on a 4 point scale ranking from not at all to as preoperatively.

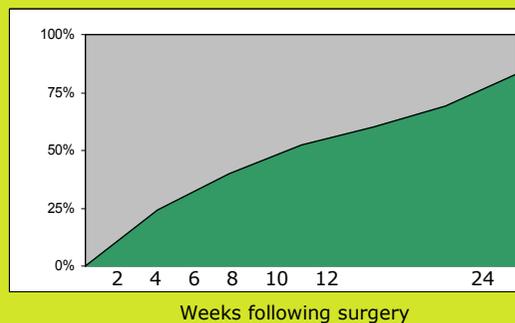
Furthermore, the first 35 patients, who had more than 6 months follow-up, were asked to fill in the same questionnaires once more and underwent a 24 hours pad test.

### Results:

50 patients were included. Mean age at surgery was 64 years. 38/50 patients (76%) had non-nerve sparing RRP. 30 patients had lymphadenectomy performed.

No correlation between preoperative characteristics – alcohol/smoking habits, BMI, educational level, and employment and time to recovery was found. Likewise no correlations between operative procedures and findings and time to recovery could be demonstrated. Twelve weeks following surgery 76% of the patients had regained full recovery, increasing to 83% at a follow-up at a minimum of 24 weeks.

Figure 1, Percentage of patients reporting full recovery following RRP



The only factor correlating to time to recovery was urinary incontinence and consequently the use of pads. Younger patients had significantly lower score on urinary incontinence and a lower use of pads.

Following 12 weeks 76 % of the patients reported that they were as continent as preoperatively. Following 6 months pad test demonstrated that 29 of 35 (83%) patients had urinary leakage < 12 g. Reported continence 6 months following surgery was strongly correlated to pad test.

35 patients were followed minimum 24 weeks postoperatively and had pad tests performed. At this follow-up 30 (86%) stated that they were fully or nearly continent.

Pad test compared to patient-reported continence showed significantly higher usage of pads,  $p=0.003$  and higher loss of urine,  $p=0.001$  in patients reporting problems with incontinence.

Urinary loss was median 2 grams, range 0-80 and median 43 grams, range 3-160, respectively, figure 2.

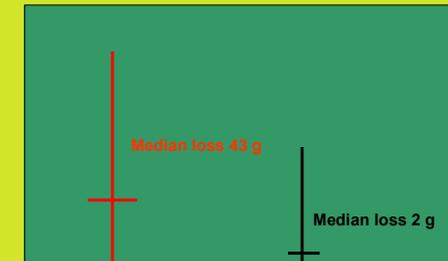


Figure 2, urinary loss in grams by self-reported continence

### Conclusions

Urinary continence following RRP seems to be the cornerstone in the process of regaining preoperative social and functional capacity. Continence assessed by questionnaire 6 months following surgery strongly correlates to the pad test result. Pad test can be omitted in patients claiming urinary continence postoperatively.