



GÖTEBORGS UNIVERSITET  
SAHLGRENSKA AKADEMIN

## MAINTAINING QUALITY OF LIFE AFTER PROSTATE CANCER DIAGNOSIS

AKADEMISK AVHANDLING

som för avläggande av medicine doktorsexamen vid Sahlgrenska  
Akademien vid Göteborgs Universitet offentligen försvaras i  
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av

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Avhandlingen baseras på följande delarbeten:

- I. Thorsteinsdottir T, Stranne J, Carlsson S, Anderberg B, Björholt I, Damber JE, Hugosson J, Wilderäng U, Wiklund P, Steineck G, Haglind E. LAPPRO: A prospective multi-centre comparative study of robot-assisted laparoscopic and retropubic radical prostatectomy for prostate cancer. *Scand J Urol Nephrol*. 2011; 45(2);102-12.
- II. Thorsteinsdottir T, Hedelin M, Stranne J, Valdimarsdóttir H, Wilderäng U, Haglind E, Steineck G. Intrusive thoughts and quality of life among men with prostate cancer before and three months after surgery – Data from the prospective LAPPRO trial. *Submitted manuscript*.
- III. Thorsteinsdottir T, Valdimarsdóttir H, Stranne J, Wilderäng U, Haglind E, Steineck G. Care-related predictors for negative intrusive thoughts after prostate cancer diagnosis – Data from the prospective LAPPRO Trial. *Submitted manuscript*.
- IV. Thorsteinsdottir T, Valdimarsdóttir H, Stranne J, Wilderäng U, Haglind E, Steineck G. Thoughts about one's own death when diagnosed with clinically localized prostate cancer. *Manuscript*.

## ABSTRACT

**Aims:** The aim of the thesis was to find suitable targets for psychological interventions possibly helping men in maintaining their quality of life after radical prostatectomy. Thereby, men's thoughts after prostate cancer diagnosis were explored and described, as well as identifying the individuals that might be in need for psychological interventions.

**Methods:** Following a one-year preparatory-phase including in-depth interviews, observations, questionnaire development, face-to-face validation and a pilot-study the LAPPRO-trial started inclusion on 1<sup>st</sup> of September 2008. Men planned for open or robot-assisted laparoscopic radical prostatectomy at 13 urological centers in Sweden were prospectively registered. During the first inclusion year 971 men were enrolled, 833 (86%) answered two questionnaires, before and three months after surgery. These included questions on quality of life, intrusive thoughts, thoughts about death and care-related factors.

**Results:** Before surgery, 603 men (73%) reported having negative intrusive thoughts about their prostate cancer at some time, as did 493 (59%) three months after surgery. Comparing those reporting with those not reporting negative intrusive thoughts at least weekly before surgery, the prevalence ratio (PR) after surgery for waking up during night with anxiety was 3.9, for depressed mood 1.8 and for impaired self-assessed quality of life 1.3.

The following factors were independently associated with negative intrusive thoughts before surgery: uncertainty of cure (PR 1.9), not being prepared for urinary (PR 1.3) or sexual bother (PR 1.3). Reporting negative intrusive thoughts before surgery predicted reporting such thoughts three months later (Adjusted Odds Ratio (OR) 3.6).

Multivariate analysis revealed that younger age (OR 1.8), living alone (OR 1.7), and non-active health-care seeking (OR 0.5) predicted the occurrence of negative intrusive thoughts three months after surgery.

Twenty-five percent of the participants reported thoughts about their own death at least once a week during the previous month before surgery and 18% after surgery. Men living in urban environment (OR 2.3), reporting having low control in their lives (OR 2.2), uncertainty about the future (OR 3.3) and crying (OR 2.0) before surgery had more often thoughts about their own death three months after surgery.

**Findings:** A number of men diagnosed with clinically localized prostate cancer planned for surgery experience intrusive thoughts with negative content as well as thoughts about own death both before and three months after surgery. These thoughts are associated with various symptoms of psychological indisposition, such as crying, feeling lack of control, uncertainty and not being prepared. Certain individuals are more vulnerable than others.

**Conclusion:** Despite available curable treatments, the diagnosis of cancer is still frightening. The upcoming surgery for prostate cancer seems to accumulate psychological reactions among men.

Screening for and recognizing harmful thoughts could be valuable in supporting men shortly after prostate cancer diagnosis to maintain their quality of life. Intervention studies aiming at neutralizing negative intrusive thoughts, such as with expressive writing, could be designed based on our findings.

**Keywords:** Prostate cancer, quality of life, clinical trial, intrusive thoughts, thoughts about death, psychological adaptation, treatment decision.

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