Adverse effects of curative treatment of prostate cancer

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Akademisk avhandling

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Avhandlingen kommer att förvaras på engelska.

Fakultetsopponent: Professor Francesco Montorsi, Department of Urology, Vita Salute San Raffaele University, Milan, Italy.
Abstract

Background Screening for prostate cancer is debated, there is conflicting data on the net benefit of screening. Men who consider screening need to be informed on the pros and cons. Rehospitalization after surgery can be used as an indicator of general quality of care. For radical prostatectomy, little is known on the readmission rate after surgery. Men diagnosed with low- and intermediate-risk prostate cancer have low prostate-cancer specific mortality. However, adverse effects after curative treatment can be severe and decrease quality of life. Curative treatments for prostate cancer differ mainly in the pattern of adverse effects but detailed analysis of long-term adverse effects is lacking.

The aim of this thesis was to assess the perioperative quality of radical prostatectomy and the risk of adverse effects after curative treatment for prostate cancer.

Material and Methods In this thesis, data from the National Prostate Cancer Register (NPCR) and other nationwide Swedish registers were used. By use of the Swedish personal identity number, NPCR was cross-linked to other registers creating Prostate Cancer data Base Sweden (PCBaSe), a large dataset for research.

Results The proportion of men who had received information on the pros and cons of screening for prostate cancer with PSA testing was low (14%) indicating that the majority of men who were screened did not make an informed decision. The risk of rehospitalization within 90 days after radical prostatectomy was approximately 10% and similar after retropubic and robot-assisted radical prostatectomy. Compared to controls, there was an increased risk of adverse effects after both radiotherapy and radical prostatectomy up to twelve years after treatment and the overall risk was quite similar after retropubic and robot-assisted radical prostatectomy.

Conclusion Improved information to men on the pros and cons of PSA screening is warranted. The risk of adverse effects was elevated up to 12 years after curative treatment for prostate cancer. The pattern of adverse effects was different after radiotherapy and radical prostatectomy but quite similar after retropubic and robot-assisted radical prostatectomy.

Keywords

Prostate cancer, prostate-specific antigen, decision aids, radical prostatectomy, radiotherapy, patient readmission, adverse effects.