FACULTY OF MEDICINE AND HEALTH SCIENCES

Optimizing oncological and functional outcomes in localized and metastatic prostate cancer

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SUMMARY

Prostate cancer (PCa) is the most prevalent malignancy in men in Europe. For men with ***localized PCa***, radical prostatectomy represents one of several therapeutic options. Compared to the standard anterior approach for robot-assisted radical prostatectomy (SA-RARP), Retzius-sparing RARP (RS-RARP) is an alternative approach that results in better early continence recovery after surgery due to better preservation of supporting anatomical structures around the urethral sphincter.

Although RS-RARP was introduced as early as 2010, no detailed description of the surgical approach was available in literature. Therefore, we provided a detailed description of RS-RARP with the aim of providing guidance to surgeons who wish to adopt this technique.

We demonstrated that a surgeon experienced in SA-RARP can safely transition to RS-RARP without a significant increase in complications or significant differences in short-term oncologic outcomes. RS-RARP effectively resulted in superior continence outcomes compared to SA-RARP. An in depth exploration of the underlying reasons for these superior continence outcomes is provided.

Metastatic PCa still remains an incurable condition today. However, the treatment landscape for metastatic hormone sensitive PCa (mHSPC) has radically changed over the last decade. Early systemic treatment intensification has led to significant improvement in survival outcomes of mHSPC patients in phase 3 trials.

However, because of strict in- and exclusion criteria in phase 3 trials with underrepresentation of heavily comorbid and/or elderly patients, the results of these trials cannot always be broadly extrapolated to the entire mHSPC population in daily clinical practice. In this regard, “real world” data are of great importance to evaluate the efficacy and safety of new systemic treatments.

Our proper real-world data analysis demonstrated that the radiographic progression-free survival of mHSPC patients treated with androgen deprivation therapy + abiraterone acetate or docetaxel is shorter in clinical practice than in phase 3 trials, possibly due to patient selection bias in these phase 3 trials.

A significant proportion of mHSPC patients remains undertreated in daily practice and thus not treated according to the standard of care. Although this proportion has decreased with the introduction of novel systemic treatments, different patient-related and/or physician-related reasons for undertreatment remain, which are discussed in this thesis.

The future treatment landscape for mHSPC patients is gradually evolving towards personalized and biomarker-driven oncology where new biomarkers may guide treatment decision making and select patients for treatment intensification or de-escalation.

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