

Chairperson's Introduction

Thomas Wiegel

Department of Radiation Oncology, University Medical Centre Ulm, Germany

Successful efforts, for example, prostate specific antigen levels (PSA), led in the past to diagnosis of prostate cancer at an increasingly early stage. However, in contrast to these efforts, there are still a significant number of men presenting with locally advanced disease. The definition of 'locally advanced prostate cancer' still differs slightly, but normally it is defined as prostate cancer clinically extended beyond the prostatic capsule without, or in some definitions, also with lymph node involvement but clearly without distant metastasis. The common staging system is the TNM-system where T₃-stage refers to palpable disease indicating that the tumour has penetrated through the prostate capsule. T₄-stage indicates invasion of a structure adjacent to the prostate but without seminal vesicle infiltration. Correct staging of these locally advanced tumours is difficult, including both over- and under-staging of tumour extension. For example, clinical T₃-cases have a 30% chance of becoming a pT₂-tumour following radical prostatectomy. The same problem remains for the estimation of the risk of pathological lymph node invasion.

Over the past years, a combination of hormonal treatment and radiotherapy was often defined as the standard of care in these patients. This was also related to the high rate of positive margins in these patients (up to 75%) and the rate of side-effects in the former times of radical prostatectomy. However, due to better techniques of radical prostatectomy, the rate of positive surgical margins in these patients decreased to 10–20%. Additionally, the morbidity of this procedure decreased significantly. Moreover, randomised studies demonstrated an advantage of adjuvant radiotherapy in case of pT₃-tumours with positive surgical margins, thus indicating a better outcome. Therefore, there is an increasing debate about the role of surgery with or without adjuvant treatment compared with radiation therapy and hormonal treatment, thus reflecting the rate of side-effects of the long duration hormonal treatment too.

On the other hand, radiation techniques improved over the past year and yielded in higher doses with a significant better biochemical disease-free outcome on the one hand and a decreased rate of severe late

side-effects on the other hand. 3-dimensional treatment planning and intensity modulated radiotherapy became some forms of standard procedures. Therefore, the best treatment for the individual patient with this stage of disease is not well defined.

Furthermore, there is an increasing debate to define the best treatment in case of cancer progression following radiotherapy or surgery. Radiotherapy in the case of increasing PSA is well-established with a high rate of biochemical responders. However, after 5–10 years following radiotherapy only 20–40% of these patients still remain disease-free. Therefore, the best individual treatment, possibly in combination with other modalities, is under debate. Moreover, the value of radical prostatectomy following local progression after radiation therapy has changed over recent years. Formally, it was a rare procedure due to a high rate of significant side-effects such as incontinence and erectile dysfunction as well as rectum lesions, thus having a high impact on the quality of life of these patients. However, due to newer techniques in radical prostatectomy nowadays, the rate of severe side-effects is acceptably low and this procedure remains the only chance of cure for these patients. The more we know about the results of these procedures due to the different risk groups, and also about the side-effects, the better we can define the role of the different procedures in treating these patients.

This symposium focuses on the role of surgery alone in locally advanced prostate cancer, on the interdisciplinary combined treatment modalities, combination of hormonal treatment and radiotherapy, the option of adjuvant radiotherapy for high risk patients, the treatment of a PSA increase following radical prostatectomy and also the best treatment of patients with local progression after radiotherapy. This symposium provides guidelines on how to treat these groups of patients and how to minimise possible side-effects by choosing the best treatment modality.

Conflict of interest statement

None declared.