Functional Results and Oncological Outcome of Radical Prostatectomy Used as a Primary Treatment in Locally Advanced Prostate Cancer

Introduction and Objective: The optimal management of locally advanced prostate cancer (LAPC) still remains controversial. Our aim was to assess the functional and oncological outcome of radical prostatectomy (RP), applied with curative intent to patients with LAPC.

Materials and Methods: Since 1996, RP was offered to any eligible patient with biopsy proven prostate cancer and no clinical evidence of extranodal metastatic disease. Among 205 cases, operated by a single expert surgeon, there were 124 cases (60.5%), identified as LAPC (pT3-4 N0, or any pT N1 disease). As an adjunct to surgery, adjuvant radiotherapy and/or hormonal therapy were administered according to the current guidelines. LAPC patients were compared with those with organ-confined prostate cancer (OCPC) in regard to the functional results and the oncological outcome.

Results: The median blood loss and the operative time were significantly higher, while the preserved potency rate was significantly lower in the LAPC group. There were no significant differences between groups in regard to the continence rate and to all other complications, directly related to surgery. Within a mean follow-up of 50.9 months (±46.5 SD), 92.6% of the OCPC patients and 59.7% of those with LAPC had undetectable PSA levels and no evidence of malignancy. The 10-year Kaplan-Meier estimates of the disease-free, the overall and the cancer–specific survival were 87.5%, 73.8% and 94.1% for OCPC, and 35.2%, 60.4% and 67.9% for LAPC, respectively.

Conclusions: RP, as a first-line treatment of a multimodal approach, is a viable treatment option in LAPC. It is associated with acceptable morbidity and survival benefits for the patients.