

Radical Prostatectomy for Clinical T3 Prostate Cancer: Changing Trends During a 24-Year Period

Introduction and Objectives: The objective of this study is to determine whether in a single-centre series of radical prostatectomy (RP) for locally advanced prostate cancer (PCa), year of RP is an independent factor predicting outcome. The variability in clinical under- and over-staging in different time spans is also compared.

Materials and Methods: Between 1987 and 2010, 285 patients with cT3a PCa, underwent RP at our institution. Clinical variables included age, PSA, final stage, specimen Gleason score, nodal status, margin positivity, cancer volume and year of RP. Uni- and multivariable Cox proportional hazard analysis was used to determine the predictive power of the variables in biochemical progression free survival (BPFS) and clinical progression free survival (CPFS).

Results: Although PSA at diagnosis significantly decreased in time, over- and under-staging were significantly different. Furthermore, mean cancer volume remained stable and final Gleason score significantly increased in time. Positive surgical margin rate improved significantly by each time span. Year of RP was not an independent predictor of BPFS and CPFS.

Conclusion: Over the last 2 decades, locally advanced PCa has retained its high-risk features. Although a shift towards lower PSA at diagnosis and pathological organ confined PCa is evident in cT3a PCa, Gleason score significantly increased, and cancer volume remain stable in time. The year of RP is not an independent predictor of BPFS and CPFS.