

## **Radical Prostatectomy (RP) with Extended Pelvic Lymphadenectomy (EPLND) For pT3b-T4 Prostate Cancer (PCa): Long-Term Results of a Single Centre**

**Introduction and Objectives:** RP+EPLND has been suggested as a possible treatment option in patients with cT3 Pca by different groups. Few very-term data exist on the fate of pT3b-T4 PCa patients treated by RP+ EPLND. The objectives of this study were to evaluate the oncological outcomes of pT3b-T4 Pca patients >9 years after radical surgery and to observe side effects.

**Material and Methods:** From March 2000 to December 2005, 602 radical prostatectomies have been performed by a single surgeon. There were 105/602 pts. (17.4%) who were staged as clinical T3. After surgery, 40/105 pts. were pT3b (31) or T4 (9). The mean age was 68.1 (range 51-76) and the mean pre-op PSA was 24.5 ng/ml (range 4-130 ng/ml). All the pts. were Mo (negative CT and bone scan). Surgery: a bilateral EPLND was always performed. The number of nodes removed varied from 20 to 45 (mean 32.5). The retrograde extraponeurotic approach with removal of Denonviller fascia was used. Nerve sparing was never attempted. Additional surgical margins of the prostatic fossa (bladder neck, lateral, base and urethra) were taken after RP for a more complete staging.

**Results:** P Stage: p T3b = 31, p T4 = 9. Grade: Gleason score < 6 = 2 (5%), Gleason score 7 = 7 (17.5%), Gleason score 8-10 = 28 (70%). Grade undetermined = 3pts. There were 30/40 pts. (92.5%) who had positive margins while 26/40 pts. (65%) had positive nodes: 20/31(64.5%) in pT3b and 6/9 (66.6%) in pT4. Mean follow-up was 110.3 months (range 86-140 mos). Two pts. were lost to follow-up and 1 pt. died after 15 days from surgery for pulmonary embolus. Thirty-seven pts were followed regularly. Of these 25 (67.6%) received immediate adjuvant Hormone therapy (HT) after RP. Two pts. had Radio (RT)-Chemotherapy+ HT and 2 pts RT+ HT. Overall survival was 57.5% (23/40 pts.). There were 18/40 who were T3b (45%) and 4/40 T4 (10). DSS was 75% (30/40 pts.): 23 were pT3b (57.5) and 6 pT4 (17.5%). There were 8/37 pts. who received RP+EPLND alone: 4/8 pts. had an undetectable PSA (0.001-0.01ng/ml), 3 had PSA of 0.8,2.7 and 3.6 ng/ml, in 1 pt. PSA was not available. There were 11/25 pts. (44%) treated with immediate HT who had an undetectable PSA (0.001-0.01ng/ml), 9/25 pts (36%) had PSA progression (0.8-17.8 ng/ml) and died of the disease. Complications: mortality 1/40 (2.5%), Lymphoceles = 35%. Rectal injuries = 5% with intra-op repair.

**Conclusions:** The combination of RP+ EPLND and HT +/-RT resulted in a valid treatment option for pts. with pT3b-T4 PCa. Nine-year disease specific survival (DSS) was 75%. There was 10% and 27.5% of pts. with surgery alone and surgery + immediate HT who had an undetectable PSA after 9 years. Larger studies are needed to confirm these results.