P011 Salvage radiotherapy for prostate cancer on relapse after radical prostatectomy - How important is an early start?

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Introduction & Objectives: Salvage radiotherapy (sRT) is a potentially curative treatment for patients with relapse after radical prostatectomy (RP) without distant metastasis. Early sRT has shown equivalent outcomes to an adjuvant strategy, with the advantage of avoiding overtreatment. This study intends to characterize the population who underwent sRT in our institution and to determine the impact of an early onset of radiotherapy, by comparing two groups (with a pre-sRT PSA ≤ 0.5 ng/mL – group A, versus > 0.5 ng/mL – group B).

Materials & Methods: A retrospective analysis was performed, including patients who underwent sRT for clinical or biochemical relapse after RP in our institution between 2012 and 2017. The following parameters were evaluated: biochemical relapse-free survival (BC-RFS; defined by PSA); clinical relapse-free survival (C-RFS; defined by physical examination, CT, 68Ga-PSMA-PET, 18F-choline-PET or bone scan after biochemical relapse); additional hormone therapy-free survival (HT-FS); and overall survival (OS).

Results: We included 277 patients with a median age of 68 years (48-81). The prostate bed was irradiated in all patients, most to a total dose of 66-70Gy (78.7%). An additional dose to prostate bed foci of relapse was delivered in 33.2% patients and pelvic nodal areas were included in 9.7% (most to 45Gy). Survival analysis was performed on 264 patients with 35.6 months of median follow-up. Median pre-sRT PSA was 0.59 ng/mL, with 45.5% patients undergoing sRT with PSA ≤0.5 ng/mL (group A). There was a higher frequency of stage pT3a or b after RP on group B than on group A (51.8% vs. 32.7%, p=0.001), with no other significant differences between the two groups. At 3 years, BC-RFS was significantly superior on group A (67.8% vs. 56.0%, p=0.011), as well as HT-FS (86.6% vs. 74.6%, p = 0.001). No differences were found on C-RFS (82.3% vs. 80.6%, p=0.324) or OS (96.8% vs. 96.5%, p=0.479). Median time from relapse to sRT was longer on group B than on group A (13.1 vs. 5.5 months, p<0.001).

Conclusions: An early implementation of sRT (with a PSA ≤0.5ng/mL) has been associated with better BC-RFS. Our results corroborated these observations. In this study, time from relapse after RP to sRT was longer in the group that underwent sRT with PSA >0.5 ng/mL. This finding could be due a longer process of restaging or to a late referral for radiotherapy. Early restaging and referral after biochemical relapse could allow sRT to be started on lower PSA levels, optimising outcomes.