

Salvage focal vs salvage total cryoablation for radio-recurrent prostate cancer: 7 years experience

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Introduction: We present 7-year experience of oncological and functional outcomes of Salvage Focal (SFC) and Salvage Total (STC) Cryoablation (CRYO) for Radio-recurrent Prostate Cancer (RTr-PCa).

Methods: From Dec/2003 to Aug/2010, 50 men underwent SFC (N=25) or STC (N=25) for RTr-PCa. SFC patients had biopsy-proven unilateral PCa and underwent a hemi-CRYO of the prostate. STC patients underwent CRYO of the whole prostate gland. Two freeze-thaw cycles were used to perform prostate CRYO. Follow up was assessed by PSA, TRUS, biopsy and questionnaires at 3, 6, months and annually.

Results: Median (range) age, PSA and Gleason score for the SFC group were 71 y (59-81); 2.8 ng/ml (0-8.2) and 7 (6-8), while, those for STC were 73 y (57-83), 3.9 ng/ml (0.1-12) and 7 (6-9), respectively.

Oncological Outcomes: Within one year after SC, the median percent PSA-decrease was 89% for SFC and 98% for STC. The median (range) follow up was 31 mth (4-90) for SFC and 53 mth (12-92) for STC. No patient died. One patient treated with STC developed bone metastases. Using the Phoenix criteria (PSA nadir + 2 ng/ml), 8 SFC and 3 STC patients had biochemical failure (BF), and the 5-year biochemical free survival (BFS) was 54% and 86% respectively (p=0.05). In those patients with no BF, the median PSA remained stable, ranging from 0.2 to 0.6 ng/ml for SFC and 0.1 to 0.1 ng/ml for STC during the follow up period. Follow up biopsy-proven cancer occurred in 2 vs 1 patient at SFC vs STC, respectively.

Functional Outcomes: New onset urinary incontinence occurred in none (0) of the SFC vs 3 (13%) of the STC patients. One (4%) patient in the STC group developed a recto-urethral fistula.

Conclusions: SFC and STC after radiation-failure are feasible and safe. SFC offered comparable cancer control to STC with lower morbidity.