Focal Ablative Salvage Therapy for Radio-Recurrent Prostate Cancer

Men who have previous radiotherapy for localised prostate cancer

Localised recurrence on cross-section imaging, MRI and biopsy

Focal HIFU or Cryotherapy

Results

- 3 out of 4 men required no further cancer treatment after 6 years
- About 9 out of 10 men survived over 6 years after focal treatment
- Less than 1% serious complication rate

BOTTOM LINE: FOCAL ABLATIVE SALVAGE THERAPY AFTER RADIO-RECURRENT PROSTATE CANCER IS SAFE AND PROVIDES GOOD CANCER CONTROL OVER 6 YEARS

Reddy D, et al. ASCO 2020
Focal ablative salvage therapy of the prostate after radiofailure, is safe and provides good oncological control at 3 and 6 years

INTRODUCTION AND OBJECTIVES

Patients with radio-recurrent localised prostate cancer are traditionally given the option for salvage radical prostatectomy, or androgen hormone therapy. Both options are limited due to complications and associated systemic and functional morbidity.

The study evaluated if Focal Ablative Salvage Therapy (FAST) with cryotherapy and high intensity focused ultrasound (HIFU) may offer a safe alternative, providing oncological control.

METHODS

- All patients were diagnosed using mpMRI followed by transperineal targeted and systematic prostate biopsy.
- If mpMRI was unavailable, all patients underwent template (template) biopsy.
- All patients were staged with pelvic MRI, cross sectional imaging (CT Chest/Abdomen or PET CT) and bone scan.
- Cryotherapy was used for brachytherapy failure, anterior or seminal vesicle disease
- HIFU: Sonablate device (Sun南阳 Inc., USA)
- Cryotherapy- Varilase (Varilase Scientific)
- Failure-free survival was defined as freedom from systemic therapy, whole-gland treatment, metastases or prostate cancer-specific death (up to 1-2 FAST sessions) permited
- Up to 3 HIFU ablation was considered focal treatment
- Secondary outcomes included adverse events and overall survival

RESULTS

356 patients underwent FAST between 28/1/2004 and 21/10/2019 for radio-recurrent prostate cancer (Table 1). 98% (95%CI) at 3 and 6 years were 81% (76-87%) and 75% (68-83%), respectively. Median (IQR) time to failure was 15.9 months (10.7). Figure 1: 31 (8.7%) underwent further focal salvage re-treatment.

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>3 Years</th>
<th>6 Years</th>
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<tbody>
<tr>
<td>Median follow-up, months (IQR)</td>
<td>43.3 (23.4-58.5)</td>
<td>69 (45-73)</td>
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<td>Median age, years (IQR)</td>
<td>69 (65-73)</td>
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<td>Median PSA, ng/mL (IQR)</td>
<td>4.0 (1.7-7.2)</td>
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<td>HIFU, % (n)</td>
<td>54.5% (294/538)</td>
<td>45.3% (262/579)</td>
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<td>Cryotherapy, % (n)</td>
<td>45.3% (262/579)</td>
<td>45.3% (262/579)</td>
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<td>Quadrant ablation, % (n)</td>
<td>36.9% (328/888)</td>
<td>18.0% (244/347)</td>
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<tr>
<td>Hemi-ablation, % (n)</td>
<td>36.9% (328/888)</td>
<td>18.0% (244/347)</td>
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<tr>
<td>Hecrane-ablation, % (n)</td>
<td>1.4% (5/356)</td>
<td>1.4% (5/356)</td>
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</table>

Table 1: Patient demographics of patients that underwent focal ablative salvage therapy for radio-recurrent disease, and adverse events.

1 (0.3%) patient was managed for recto-urethral fistula formation. 16 (4.5%) were treated for UTIs.