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OBJECTIVES

Patients diagnosed with recurrence after whole gland radiotherapy are often managed with either salvage radical prostatectomy or systemic treatment. Such treatments confer significant morbidity and reduction in quality of life.

We evaluated the safety and oncological outcomes of patients after treatment with Focal Ablative Salvage Therapy (FAST) for localised recurrence of prostate cancer.

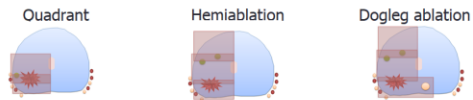
METHODS

Consecutive patients reported between Nov 2006- July 2020, in the prospective 'HEAT' and 'ICE' registries from 8 UK centres that underwent FAST for recurrence following primary whole-gland radiotherapy or brachytherapy were analysed.

Patients underwent radioisotope bone-scan or cross-sectional imaging to ensure non-metastatic disease.

Cryotherapy was performed using IceNet/ Visualice- Boston Scientific, HIFU performed using the Sonablate (500 and 3G) device (Sonacare Inc., Charlotte, NC, USA).

Permissible ablative patterns were :



Follow up consisted of 3 monthly PSA for the first year then 6 monthly thereafter. mpMRI was performed at 12 months. For cause mpMRIs were indicated in cases with 3 consecutive PSA rises, and biopsies offered if mpMRI demonstrated suspicion for recurrent or residual disease.

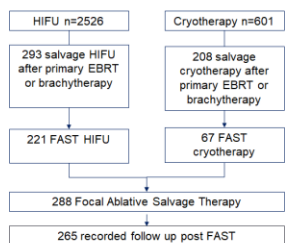
Adverse events were classified using the Clavien- Dindo scoring system.

Failure Free Survival (FFS) was defined as avoidance of systemic therapy, whole-gland treatment, metastases or prostate cancer- specific death. Secondary outcomes included re-treatment free survival and overall survival.

Statistical analysis including Kaplan-Meier estimates were analysed using IBM SPSS version 25 (Armonk, NY, USA) and R version 3.5.1 (R Foundation for Statistical Computing, Vienna, Austria; <https://www.R-project.org/>).

RESULTS

Figure 1: Proportion of patients treated with FAST following localised radiorecurrent prostate cancer



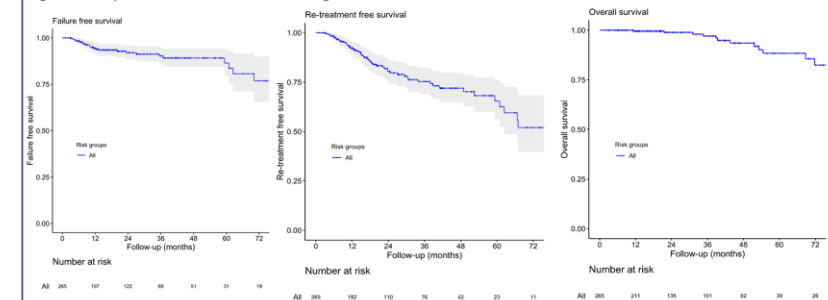
Focal Ablative Salvage Therapy can provide safe good oncological control for patients with localised radiorecurrence

RESULTS

Table 1: Demographics of patients undergoing FAST for localised radiorecurrent prostate cancer

Demographic	N=288
Median Age, yr (IQR)	70 (66-74)
Median pre- FAST PSA, ng/ml (IQR)	5.3 (3.3-8.2)
rT-Stage, n(%)	
T2	188 (65.3)
T3	68 (23.6)
ISUP group, n(%)	
2	105 (36.5)
3	89 (30.9)
>3	62 (21.5)
Median follow up, months (IQR)	23.3 (12.6-44.9)
Median time from primary treatment to FAST, months (IQR)	88 (67-123)

Figure 1: Kaplan-Meier estimates following FAST



a) FFS at 6 years (95% CI): 77% (66-90)
26/265 (9.8%) recorded >=1 failure event

b) Re-treatment free survival at 6 years (95% CI): 77% (66-90)
40/265 (15.1%) recorded >=1 re-treatment session

c) Overall survival at 6 years (95% CI): 82% (73-94%)

Table 2: Safety outcomes following FAST

21/288 (7.3%) reported any adverse event

Complication	N/288 (%)
Urinary Tract Infection	18 (6.3)
Haematuria	1 (0.3)
Pubic Bone Osteitis	1 (0.3)
Recto-urethral fistula	1 (0.3)
Clavien Dindo Score	
I	0 (0)
II	20 (6.9)
IIIa/b	1 (0.3)
IV/V	0 (0)

CONCLUSION

FAST for radiorecurrent prostate cancer has low rates of significant adverse events and provides good short to medium term oncological control.