

 PROSTATE CANCER

## Focal laser ablation improves short-term outcomes

In the past decade, the trend towards overtreatment of prostate cancer has highlighted a need for better focal therapies, with fewer comorbidities. Now, data from a phase II trial exploring the effectiveness of MRI-guided focal laser ablation reveals promising short-term outcomes in men undergoing treatment with this technique.

Focal ablation therapy involves first identifying the location of the cancer within the prostate, followed by ablation of the region of the prostate containing the tumour. The technique used in this study delivered laser-based ablation of the prostate during MRI imaging, guided by magnetic resonance thermometry. In this study, men with previously untreated stage T1c–T2a prostate cancer, a serum PSA level of  $<15$  ng/ml<sup>3</sup>, a PSA density of  $<0.15$  ng/ml<sup>3</sup> and a Gleason score  $\leq 7$  in 25% of biopsy cores received focal laser ablation therapy.

A total of 27 men underwent the procedure, of these, four men had haematuria, three had perineal ecchymosis and two had acute urinary retention after surgery. 26 men had no detectable evidence of cancer, as confirmed using MRI-guided biopsy sampling 3 months after surgery. One patient had necrotic tissue with an appearance similar to that of Gleason grade 6 cancer. At 12 months after surgery, a total of 10 men had cancer identified on analysis of a 12-core biopsy sample, of which three had cancer located within the ablation zones and eight outside of the ablation zones.

Patients' urinary or erectile function, as quantified using median international prostate symptom or sexual health inventory for men scores, was not significantly different at 12 months after surgery compared with the median presurgery scores.

These findings indicate that focal laser ablation therapy provides promising short-term oncological outcomes in men with localized prostate cancer. Data on long-term outcomes are eagerly awaited.

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**ORIGINAL ARTICLE** Eggener, S. E. *et al.* Phase II evaluation of MRI-guided focal laser ablation of prostate cancer. *J. Urol.* <http://dx.doi.org/10.1016/j.juro.2016.07.074> (2016)