

HIFU FOR PROSTATE CANCER

Active surveillance or radical therapy are the two treatment options commonly offered to patients diagnosed with localized prostate cancer; however, both are associated with a high risk of mortality. Ablative therapies, such as high-intensity-focused ultrasound (HIFU), cryosurgery and radiofrequency ablation, have the potential to offer an interface between the two therapeutic options. Ahmed and colleagues reported the results of their experience with HIFU in men with organ-confined prostate cancer.

A total of 172 men with primary prostate adenocarcinoma were treated with the Sonablate® 500 HIFU device (THS International, Inc., Indianapolis, IN) under general anesthetic as day-case procedures. The mean follow-up time was 346 days. Patients with suprapubic catheters, compared with those with urethral catheters, had a significantly lower rate of urethral strictures (19.4% versus 40.4%). At 12 months, 70% of patients had maintained potency, while 7% of patients had mild stress urinary incontinence and 0.6% required pads. There were no occurrences of rectal toxic effects or rectourethral fistulae. At 12 months after HIFU, 78.3% of patients had a prostate-specific antigen nadir of 0.5 µg/ml or less, with 57.8% achieving a prostate-specific antigen nadir of 0.2 µg/ml or less. One session of HIFU treatment resulted in no evidence of disease in 92.4% of patients in the study.

The authors conclude that HIFU can result in acceptable short-term control of prostate cancer and that there is a high degree of certainty that men will remain continent afterwards. Moreover, two-thirds might expect to have erections sufficient for penetration 1 year following treatment. The short follow-up time is a confounding factor for this study and long-term outcomes of HIFU treatment should be investigated.

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Original article Ahmed, H. U. *et al.* High-intensity-focused ultrasound in the treatment of primary prostate cancer: the first UK series. *Br. J. Cancer* **101**, 19–26 (2009).