

High Intensity Focused Ultrasound (HIFU) for the treatment of localized prostate cancer

Haute Autorité de Santé (HAS), Saint-Denis La Plaine, France
Author : Paul MERCKX, HAS, France

Aim

To evaluate the clinical effectiveness of HIFU therapy for early localized prostate cancer. HIFU therapy is applied as primary treatment for low and intermediate risk localized prostate cancer (T1-2 NxM0) in patients older than 70 years, and for local recurrence of prostate cancer after radiotherapy failure.

Conclusions and results

Owing to the poor quality of evidence identified (case-series only, and in most cases a short term follow-up), it is not currently possible to give a firm answer to the question: Are the advantages of HIFU sufficient to counterbalance the complications and uncertainty of results at long term, compared to standard treatment options including either differed (watchful waiting) or immediate (in case of recurrence) hormonal treatment? Adverse events of HIFU therapy mainly affected the urinary tract (postoperative obstruction and infection; long term incontinence), rectum (rectal fistulae) and potency (impotence).

Recommendations (if any)

Recommended update in five years at the earliest.

Methods

Assessment strategy consisted in an in-depth literature search and analysis of scientific data (published and unpublished studies), then consulting of a multidisciplinary working group composed of French urologists, radiotherapists, medical oncologist, primary care physician and patient. 21 case-series were identified related to approximately 2500 selected patients treated with different devices over time of the same manufacturer of Ablatherm® (n=13) or Sonablate® (n=8). Literature data and analysis were discussed with the working group. Conclusions have been reviewed by the Committee for Assessment of Medical and Surgical Procedure. The HAS Board has approved the final report before publication.

Further research/reviews required

Areas recommended for further research are: Controlled clinical trials and/or observational studies with sufficient follow-up to measure benefits in terms of survival, long term adverse effects and quality of life.