

LOCALIZED PROSTATE CANCER (PCA) TREATED BY HIGH INTENSIVE FOCUSED ULTRASOUND (HIFU).

Christian Chaussy, Stefan Thueroff Muenchen, Germany. (Presented by Christian Chaussy)

INTRODUCTION AND OBJECTIVES: At diagnosis, PCA is organ confined in 70% of the cases. 25% of these patients undergo local therapy (surgery/radiation). Afraid of invasiveness and side effects related to these classical therapies, the remaining patients choose alternatives with possible disease progression (watchful waiting) and/or systemic side effects (hormonal ablation). Local HIFU (85°C) provides minimally invasive coagulation of prostatic tissue with high precision, especially in apical and dorsal areas of the prostate.

METHODS: 205 patients underwent a single session of transrectal HIFU therapy (mean treatment time 96 min.) in spinal anesthesia at 3.0 MHz / 50 W (penetration depth 25 mm). The entire prostate was treated. PSA, sextant biopsies, IPSS, QLF and complaint registration was performed at month 1, 3, 6, 12, 18 etc. for follow-up.

RESULTS: Follow-up sextant biopsies (mean 2 sets per patient) showed no evidence of cancer in 85 %. In cases with residual cancer, the tumor mass was reduced more than 90 %. PSA Nadir was < 4 ng/ml in 89 % and < 0,5 ng/ml in 32 %. After primary HIFU there were no severe side effects (no fistula, no incontinence II°III°). Auxiliary treatments were a suprapubic tube (mean 29 days) in all patients and transurethral resection of necrotic tissue (TUR, mean 7 g) in 19 %. All patients were discharged within 23 hours after treatment.

CONCLUSIONS: According to this short term follow-up, transrectal HIFU creates minimally invasive local ablation of prostate tissue with high rates of negative follow-up biopsies, low PSA Nadir and low complication rate as an alternative urological treatment for localized prostate cancer.

Support: None