Hemi salvage HIFU in patients with radiorecurrent prostate cancer
E. Baco1, S. Crouzet2, E. Rud1, O. Rouviere2, J.-Y. Chapelon3, V. Berge1, A. Gelet2
1 Oslo University Hospital, Aker, Oslo, Norway
2 Hospices Civils de Lyon, Urology and Transplantation 3, E. Herriot Hospital, Lyon, France
3 INSERM, Lab. TAU Inserm, Unit 1032, Universite de Lyon4, Lyon, France

Introduction: One third of patients treated with external beam radiation therapy (EBRT) for localized prostate cancer (PCa) experience local recurrence. Salvage treatment options include prostatectomy, cryoablation, and high intensity focused ultrasound (HIFU). Whole gland treatment in these patients offers acceptable cancer control, but carries a risk of severe urinary incontinence and reduction of QoL. In patients with unilateral local relapse, focal HIFU is feasible. The aim of this prospective study was to evaluate the effect of Hemi HIFU in patients with unilateral recurrence after EBRT.

Materials and Methods: Between 2009 and 2011 43 patients were prospectively included in 2 centers. Inclusion criteria were positive MRI and biopsy in one lobe diagnosing unilateral cancer after EBRT (41 pts) and after brachytherapy (2 pts). Median age was 69 years (51-78), pre HIFU PSA was 5.19ng/mL (3.47-6.91) and Gleason score was 7≤7:28, ≥8:10, ND 7). Mean follow-up was 12 months. HIFU treatment was performed with Ablatherm®.

Results: The mean PSA nadir was 0.77 (0.51-1.04). Control biopsies (in 12 pts with rising PSA) were negative in 75% (n=9) and positive in 25% (n=3): in the treated lobe: 2, in the contralateral lobe:1. Disease progression occurred in 10 pts (23%): local recurrence: 3 pts, metastasis: 4 pts and rising PSA without local recurrence or proven metastasis in 3pts. Five patients received androgen deprivation and 1 redo-HIFU. Severe incontinence occurred in 7% (n=3).The mean ICS score before/after treatment were score A: 0.51±0.27 / 2.30±0.59 and score B: 0.37±0.18 / 1.9±0.46. No significant change of EORTC-C 30 QoL and IPSS scores were observed: QLC30 35.07±8.57 VS 34.56±9.98; IPSS: 7.07±5.77 VS 8.84±5.72. The IIEF5 score decreased from 11.89±8.64 to 7.66±6.62.

Conclusion: Hemi-salvage HIFU is efficient in patients with unilateral radio-recurrent PCa with a preserved QoL. It may offer comparable cancer control to whole gland treatment.