SC82 Medium term oncological outcomes in a large cohort of men treated with either focal- or hemi-ablation with HIFU for primary localized prostate cancer

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Aim of the study: To report medium-term oncological outcomes in patients receiving primary focal treatment with HIFU for PCa.
Materials and methods: Consecutive men treated by means of primary focal HIFU for PCa at two centres by 6 treating clinicians were prospectively collected. Patients were submitted to either a focal ablation or hemiablation using HIFU (Sonablate 500). The primary objective of the study was to assess medium-term oncological outcomes defined as overall survival, freedom from biopsy failure, freedom from any further treatment and freedom from radical treatment after focal HIFU. The secondary objective was to evaluate the changes in pathological features among patients treated by means of focal HIFU over time. We finally assessed the relationship between year of surgery and 5-years retreatment probability.
Results: One thousand and thirty-two men treated between November 2005 and October 2017 were assessed. The median age was 65 yrs and median prostate-specific antigen was 7 ng/ml. The majority of patients had Gleason score of 3 + 4 (63%). Median follow-up was 36 months (IQR: 14–64). The overall survival at 24, 60 and 96 months was 99%, 97% and 97%, respectively. Freedom from biopsy failure, defined as absence of Gleason 3 + 4 disease, was 84%, 64% and 54% at 24, 60 and 96 months. Freedom from any further treatment was 85, 59 and 46% at 24, 60 and 96 months, respectively. Roughly 70% of patients retreated received a re-application of focal approach. Freedom from radical treatment was 98%, 91% and 81% at 24, 60 and 96 months. During the study period we have seen an increase in the proportion of patients undergoing focal HIFU with Gleason 3 + 4 disease and with T2 mpMRI staged disease. Finally, we report a reduction over time in the proportion of men undergoing re-treatment within 5-years of first treatment.
Discussion: Focal therapy for PCa using HIFU as energy source is a feasible therapeutic strategy with acceptable survival and oncological results at medium term, at least for men with up to intermediate risk disease, that appears improving over time. Re-do focal treatment is a feasible technique whose functional and oncological outcomes are under longer term evaluation.

SC83 Long term oncological outcomes of cryotherapy and HIFU in whole gland and first line treatment for localized prostate cancer

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Aim of the study: Cryotherapy and High-Intensity Focused Ultrasound (HIFU) are two alternatives to surgical or radiotherapy in the treatment of localized prostate cancer. Both techniques are being investigated but had never been directly compared. To assess and compare oncological outcomes of cryotherapy and HIFU as first line treatment in significant localized prostate cancer.
Materials and methods: Retrospective bicentric comparative study including 139 patients who underwent cryotherapy (n = 40) or HIFU (n = 99) from 2005 to 2016 for localized prostate cancer of low to intermediate NCCN prognosis (PSA <20 ng/mL, Gleason < 8, DRE.
Results: In cryotherapy vs HIFU: median age at the diagnosis was 74 [42–81] vs 75 YO [54–83] (p = 0,28), low NCCN group was 28% vs 41% and intermediate NCCN were 72% vs 53% (p = 0,17). In HIFU group, 93% of patients had a pre-HIFU TURP, while in the cryotherapy group 25% of patients received a pre-treatment androgen deprivation because of prostate volume > 50 mL. Mean follow-up were 44 vs 88 months in cryotherapy vs HIFU (p < 0.01). 80% of patients reached a PSA nadir < 0,5 ng/mL after cryotherapy vs 67% in the HIFU group (p = 0,21). The 7-yr Biochemical recurrence-free survival (BFRS) rates (Phoenix definition) were 60 vs 56% in cryotherapy and HIFU respectively (p = 0,80). The 7-yr 2nd line treatment-free survival were 74% vs 80% in cryotherapy vs HIFU (p = 0,05). In a Cox model adjusting survival on follow-up, there was no significant difference in BFRS between cryotherapy and HIFU. Multivariate analysis identified a PSA nadir < 0,5 ng/mL as the strongest independent prognostic factor à biochemical recurence for both technic. 100% of were continent before treatment, versus 83% and 84% at 1year after Cryotherapy and HIFU respectively. Preoperative impotency/absence of sexual activity was 80% in both groups. No recto urethral occurred in both groups.
Discussion: Cryotherapy and HIFU provided similar rate of PSA nadir < 0.5,g/mL, biochemical recurrence rate and functional results. A PSA nadir > 0,5 ng/mL was the main predictive factor of biochemical recurrence for both technic.

SC84 Cryotherapy for prostate cancer: Oncological and functional outcomes

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Aim of the study: Cryoablation, has been developed to reduce morbidity and improve functional outcome without compromising oncological results in selected patients with prostate cancer (PCa) The aim of our study is to evaluate oncological, functional and peri-post-operative results of hemi-ablation (HA) vs whole gland (WA) cryoablation as first line treatment for localized low-intermediate risk ((D'Amico classification) PC.
Materials and methods: We retrospectively evaluated patients who underwent cryotherapy as first line treatment for localized low-intermediate risk PCa between 2010 and 2018. Pre-operative work up included multiparametric magnetic resonance (MRI) and prostate biopsy. Baseline characteristics, pre and perioperative data and complications according to the Dindo-Clavien classification were recorded. Recurrence was suspected in case of rising PSA more than PSA nadir +2 ng/mL Each patient suspected of recurrence underwent local evaluation with prostate MRI and systemic + targeted biopsy. The primary endpoint was defined as any second line treatment (systemic or local treatment) and was evaluated by free survival without second line treatment according to the Kaplan-Meier curve. Functional outcomes considered included urinary continence and erectile function according to validated questionnaires.
Results: Overall, 66 patients were included in this retrospective study. In WG (n = 40) vs. HB group median patients age was 74 (interquartile range [IQR] [42–81] vs 76 [71–80] years. Median BMI was 27 [22–35] vs. 26 [22–38] and Median Prostate size (ml) was 39 [20–90] vs 56 [23–120] in WG and HG group, respectively. Pre-operative erectile dysfunction was already existent in 80% vs 57% of cases. Median follow up was 41[1,5–99,00] vs 27 [0.9–93] months. Overall, 31 (46%) patients needed a MRI or biopsy for suspicious recurrence at a medium follow up of 36 months. Overall, retreatment has been recorded in 9 (13,6%) cases. Of these 5 (12,5%) and 4 (15,3) patients were in WG and HB group respectively. All of them had a intermediate risk except one patient of HB arm. No difference has been recorded in 2 line free survival in kaplan meyer analyses about of type of procedure (p = 0,73) and D'Amico risk (p = 0,17). The 40% and 28% of patients were