

incontinence at one month after procedure in WB and HB group respectively. In each groups 1 year continence was recovered in 83% of patients. ($p = 0,99$) Postoperatively 25% and 54% of patients were still potent in WG group and hemi ablation respectively. Adverse event occurred in 48% and 23% of patients in WG and Hemi ablation group ($p = 0,04$).

Discussion: In low and intermediate PCa risk, WG and HB cryoablation is an alternative treatment to the radical prostatectomy and radiation therapy, showing good medium-term oncological outcome in both group (hemi and whole gland ablation). Further studies with greater sample and longer follow up are necessary to confirm our preliminary results.

SC85 Partial vs radical cryoablation for localized prostate cancer: Oncological, functional outcomes

G. Silecchia, O. Selvaggio, B. Calò, M. Auciello, R. Di Brina, G. Carrieri, L. Cormio (Foggia)

Aim of the study: There are few studies comparing oncological and functional (urinary continence and erectile function) outcomes as well as complications of partial vs. radical cryotherapy for localized prostate cancer (PCa). The present study aimed to compare efficacy and safety of partial vs. radical cryoablation of PCa.

Materials and methods: Our internal review board approved prospectively maintained database on cryotherapy was queried to identify patients with localized PCa, as assessed by negative staging choline-PET, treated by partial or radical cryotherapy. All patients having undergone partial ablation had undergone prostate mpMRI showing unilateral disease. Patients were seen at 1 month, every 3 months for the first two years, then every six months, for clinical examination, serum PSA, questionnaires for lower urinary tract symptoms (IPSS) and erectile function (IIEF-5), and assessment of pad usage for urinary continence. Biochemical failure was defined as a rising PSA above the Nadir of more than 2 ng/mL according to Phoenix Criteria. In patients treated with partial ablation, local recurrence was defined as PCa in the treated lobe whereas tumor progression was defined as PCa in the non-treated lobe as assessed by prostate mp-MRI and fusion biopsy. Complications were scored using the Clavien-Dindo scale.

Results: From March 2012 to April 2019, 172 men met the inclusion criteria (85 whole gland and 87 partial ablation). At median follow-up (36.9 vs. 26.8 months for whole and partial gland ablation, respectively), biochemical failure occurred in 10.5% (9/85) of patients for whole gland vs. 23% (20/87) for partial ablation, with Kaplan-Meier plots showing an estimated 89.5% vs. 77% biochemical-free survival at 5ys, respectively ($p = 0.02$). Pathological failure (positive fusion biopsy) however could be demonstrated only in 15% of patients having undergone partial ablation. Specifically, only 3% were recurrence in the treated lobe and 12% were out of field cancer, thus disease in the untreated lobe. The 12-month continence rate was similar (92.9% vs. 97.7%; $p = 0.13$) for whole-gland and partial ablation, respectively. The 12-month potency rate (effective intercourse) was 31.7% for whole-gland and 49.4% for partial ablation ($p = 0.01$). The incidence of post-treatment urinary retention was 5.8% and 0% ($p = 0.02$) for whole-gland and partial ablation, respectively. No case of recto-urethral fistula was recorded for both treatments.

Discussion: Partial ablation resulted in lower biochemical recurrence free survival between the two groups at 5 years but this difference in

not significant at confirmatory prostate biopsy. Better post-treatment sexual function compared with whole-gland ablation in men with localized prostate cancer.

SC86 Percutaneous image-guided radiofrequency ablation for cT1a-b renal masses: A comparison between patients younger vs. older than 65 years

F. Mistretta, G. Mauri, N. Piacentini, G. Varano, A. Conti, G. Bonomo, S. Luzzago, P. Della Vigna, M. Catellani, E. Di Trapani, M. Ferro, G. Musi, G. Renne, F. Orsi, O. de Cobelli (Milano)

Aim of the study: To compare the safety and efficacy of percutaneous image-guided radiofrequency ablation (RFA) for cT1a-b renal masses between patients younger vs. older than 65 years.

Materials and methods: From January 2008 to June 2015 a total of 152 consecutive patients underwent an image-guided percutaneous RFA. Primary outcomes investigated were technical success, complications, retreatment rate, cancer specific (CSM) and other cause mortality (OCM). Kaplan-Meier plots graphically depicted the recurrence free (RFS) rates. Univariable (ULRM) and multivariable (MLRM) logistic regression models were used to identify predictors of persistency/recurrence of the disease.

Results: Of all 152 patients, 66 (43%) and 86 (57%) were respectively younger and older than 65 years. The overall median follow-up was 40 (IQR 28–49) months. Median tumour diameter was higher in older patients (27 vs. 22 mm; $p = 0.01$), relative to younger. No significant differences were identified in median number of masses treated per procedure, T-stage, gender, side of lesion, endophytic vs. exophytic nature and Padua score, between the two age groups. Of all 152 patients, 63 (41.4%) younger vs. 74 (48.7%) older than 65 years ($p = 0.06$) were disease free after RFA. In 1 (0.7%) younger vs. 10 (6.7%) older than 65 years a persistence of disease was identified ($p = 0.06$). All of them received secondary RFAs. Two (1.3%) younger vs. 2 (1.3%) older than 65 years underwent multiple RFAs due to multiple synchronous renal masses. No persistence was described at last control in all of these 15 retreated patients. Eight (5.3%) younger vs. 9 (5.9%) older than 65 years experienced a recurrence ($p = 0.9$). In Kaplan-Meier analyses, the 3-year RFS rate was 90.9% in younger vs. 94.2% in older than 65 years, but failed to reach statistical significance (log rank = 0.7). Of these 17 patients, 4 (23.5%) experienced a distant (adrenal glands or contralateral kidney) recurrence, 1 (25%) younger vs. 3 (75%) older than 65 years. In all these patients, the oncologic control was achieved after a second RFA. No progression or cancer related deaths were identified. One (0.7%) younger vs. 3 (2.1%) older than 65 years died due to other causes ($p = 0.8$). Of all 152 patients, according to Society of Interventional Radiology complication scale, 7 (4.6%) experienced a grade A, 6 (3.9%) a grade C and 2 (1.3%) a grade D complication. No statistical difference was identified between the two age groups ($p = 0.9$). In MLRM, tumour size > 2.5 cm resulted the only predictor of persistence/recurrence (OR 1.05; CI: 1.008–1.099; $p = 0.02$), while age younger vs. older than 65 years failed to predict this outcome.

Discussion: imaging-guided percutaneous RFA resulted oncologically safe, with a low complication rate, in both patients younger or older than 65 years old. Tumour size > 2.5 cm resulted the only predictor of persistency/recurrence of disease, while age younger vs. older than 65 years failed to predict this outcome.