are cardiovascular comorbidities or patients suffered of neurological bladder. 55 (28/27 H/Mgroups) patients were randomized preoperatively in a 1:1 fashion (2 Joule pulses at 50 Hz frequency) to HOLEP treatment (group A) or MOLEP treatment (group B) of prostate tissue. All the procedures were performed by a single experienced operator using the traditional 3 lobes technique. The primary endpoint is the evaluation of the difference in average treatment duration between the two procedures. Comparisons of means in the paired sample was performed with a two-tail T-test (Î ± power of 0.05 to observe a 10% difference in time of enucleation).
Results: Mean age was 70 in both groups. Average baseline volume of prostates were 92 and 95 ml in group A and B respectively. Comparison of the 2 modalities lead to a reduced time of enucleation for M (H/M:30.5/23 minutes;p = 0.03), time of treatment (H/M:52/46;p = 0.7) and time to hemostasis (H/M:5.5/4.6minutes; p = 0.28). Total energy for Haemostasis or enucleation was similar in both arms (p = 0.85 and 0.33 for the 2 comparisons). No bleeding was observed in both groups (p = 0.34). Decrease in Hb levels postoperatively was 0.99 and 1.08 in H and M arms (p = 0.69). Fiber consumption length was 2.97 mm and 1.87 mm in groups A and B (p = 0.05). Weight/energy ratio was similar in 2 arms (p = 0.78). Interestingly, weight/time ratio (grams of morcellated prostatic tissue/minute of enucleation) was favor in M group: 2.14 vs. 2.82, p = 0.32
Discussion: This ongoing phase 3b study of HOLEP vs. MOLEP in men with BPH is showing significant reduction in enucleation time, however demonstrating similar short-term outcomes in terms of total timing of treatment and hemostasis, energy used, bleeding (hematuria and postoperative Hb levels). There is, however, lower fiber consumption with MOLEP and a more efficient weight of enucleated tissue/time unit in the MOLEP group.

SC18 Comparison of perioperative and mid-term outcomes between thulium laser vaporization and vapoenucleation: A propensity score analysis

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Aim of the study: Thulium laser vapoenucleation (ThuVep) is considered equivalent to transurethral resection of prostate for treatment of benign prostatic obstruction. Coversely, thulium laser vaporization (Thuvap) is not yet considered comparable to the gold standard according to European Association of Urology Guidelines. We compared early and lates outcomes between ThuVep and ThuVap.
Materials and methods: Within our institutional database with prospective collected data we identified patients treated with ThuVep or ThuVap. We relied on inverse probability of treatment weighting (IPTW) to reduce the effect of inherent differences between ThuVep and ThuVap. Univariable and multivariable linear and logistic regression models (MLRM) were used.
Results: Between 2012 and 2018, we identified 692 patients treated with either ThuVep [442 (63.9%)] or ThuVap [250 (36.1%)]. Median follow-up was 44 months. Median International Prostatic Symptoms Score drop was 16. ThuVap patients had median higher preoperative maximum flow (8 vs 8.6 ml/sec; p = 0.04) and were more frequently in anticoagulant or antiplatelet therapy (29.5 vs 20.3; p = 0.002). In MLRMs testing for surgical technique predictors anticoagulant or antiplatelet therapy achieved indipendent predictor status for higher ThuVap rates (OR: 1.49; p = 0.001). However, no difference was found in early (OR: 0.90; p = 0.08) and late (OR: 0.85; p = 0.2) complication rates between Thuvap and Thuvep. Finally, Thuvap did not achieved indipendent predictor status for lower IPSS drop. Results were confirmed after IPTW adjustment.
Discussion: Based on our results no statistically significant difference exist between ThuVap and ThuVep in early and late complication rates. Moreover, IPSS drop was similar in the two groups.

SC19 Operative profile, safety and functional outcomes after Greenlight laser prostate surgery: Results from multicenter italian cohort analysis

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Aim of the study: In the two past decades, Greenlight laser therapy has been considered a valid alternative for the treatment of lower urinary tract symptoms (LUTS) associated to benign prostatic hyperplasia/benign prostatic obstruction (BPH/BPO). However, the debate on the effectiveness of laser therapy compared to conventional techniques is still open. Aim of our study is to analyze and describe the use of GreenLight laser prostate surgery in Italy, with particular regard to the surgical techniques performed and and the surgical and functional outcomes at mid term follow-up.
Materials and methods: From March 2012 to July 2018, patients who underwent GreenLight laser prostate surgery for LUTS due to BPH/BPO from 19 Italian centers were included. The following parameters were evaluated in the population: age, prostate volume, prostate adenoma volume, PSA tot, Qmax at uroflowmetry (UFM),International Prostatic Symptoms Score (IPSS), previous therapy for LUTS, use of anticoagulant/anti-aggregant. We recorded also kind of anesthesia, mean laser time (min), mean irradiation time (min), TURP conversion/completion rate, post-operative day of catheter removal, postoperative acute urinary retention (AUR), hospital stay, variation of haematocrit (Ht) and haemoglobin levels (Hb). Early complications has been classified according to the Clavien-Dindo classification, the re-operation rate within 30 days and after 30 days, the late complications and the Patient Global Impression of Improvement were also collected. Changes over time in terms of blood loss and functional outcomes (IPSS and Qmax at the UFM at 6 and 12 months) were tested with Student's test for paired samples. We assumed $p \leq 0.05$ as level of statistical significance.
Results: Overall, 1077 were enrolled in the study were, 554 (56.4%) treated with standard vaporization and 523 (48.6%) with anatomical vaporization. Complete population characteristics and surgical details are described in Table 1. The Student's T Test for paired samples showed no statistically significant differences in terms of reduction of Ht preoperative vs Ht postoperative (42.80 ± 3.911 vs 39.93 ± 5.359 CI 95% p = 0.3) and pre-intervention and post-intervention Hb levels (14.28 ± 1.464 vs 13.72 p = 0.35). Compared with the pre-operative Qmax (8.60 ± 2.640), the 6 and 12 month UFM showed a significant improvement [19.56 ± 6.291, p < 0.05 and 19.99 ± 5.923 p < 0.05]. In terms of IPSS variation, compared to the baseline level (22 ± 5.516) the 6 and 12 month follow up confirmed a significant reduction (8.01 ± 4.414 p < 0.05 and 5.81 ± 4.129 p < 0.05). Postoperative complications have been CD0, CD1, CD2, CD3, CD4 in 33.0%,35.3%, 2.9%, 0.3%, and 0.6%.