Table 2: Postoperative and early functional outcomes of patients treated with HoLEP

Variables	Learning curve eras			p-value
	< 25 cases	25-50 cases	> 50 cases	
Postoperative and functional features				
Catheter time (days) (median, IQR)	3 (3 – 5)	3 (3 – 3)	3 (3 – 3)	0.013
Hospital stay (days) (median, IQR)	5 (4 – 6)	4 (4 – 4)	4 (4 – 4)	0.001
Postop Q max (mL/s) (median, IQR)	21.4 (18.0 – 24.5)	23.0 (18.0 – 28.0)	21.8 (18.0 – 26.5)	0.206
Postop Post voiding residual (mL) (median, IQR)	30 (0 – 50)	30 (0 – 50)	30 (0 – 50)	0.977
Postop PSA (ng/mL) (median, IQR)	0.90 (0.60 – 0.90)	1.00 (0.71 – 1.50)	0.94 (0.55 – 1.50)	0.06
Postop IPSS (median, IQR)	5 (1 – 9)	5 (0 – 7)	2 (0 – 7)	0.937
Postop IIEF-5 (median, IQR)	18 (14 – 21)	17 (13 – 20)	15 (10 – 20)	0.539
Postop OAB-q (median, IQR)	13 (13 – 20)	13 (13 – 16)	13 (13 – 15)	0.381
Postop ICIQ-sf (median, IQR)	0 (0 – 0)	0 (0 – 0)	0 (0 – 0)	0.529
Postop QoL (median, IQR)	1 (0 – 2)	1 (0 – 2)	1 (0 – 2)	0.700
Δ(postop-preop) Qmax (median, IQR)	21.9 (24.5-18.5)	22 (27.1-18.5)	21.8 (27-18)	0.93
Δ(postop-preop) IPSS (median, IQR)	-20 (-14 ; -24)	-20 (-18 ; -26)	-18 (-13 ; 23)	0.33
Δ(postop-preop) ICQ-sf (median, IQR)	-7 (-8 ; 5)	-3.5 (-1.5 ; -7)	-10 (-4 ; -7.5)	0.27
Δ(postop-preop) OAB (median, IQR)	0 (0 ; 0)	-2 (-1 ; -4)	-4 (-2;-5)	0.09
Early (within 1 month) surgical complications according to Clavien Dindo(n, %)	8 (32%)	5 (20%)	8 (9.2%)	0.02
CL. complications <2 n (%)	3 (12%)	1 (4%)	2 (2.2%)	/
CL. complications >=2 n (%)	5 (20 %)	4 (16%)	6 (7.0%)	
Delayed (> 1 month) surgical complications according to Clavien Dindo (n, %)	2 (8%)	1 (4%)	5 (5.7%)	0.83
CL. complications <2 n (%)	0 (0%)	0 (0%)	2 (2.2%)	/
CL. complications >=2 n (%)	2 (8%)	1 (4%)	3 (3.5%)	

SC16 HoLEP reveals higher rates of incidental prostate cancer compared to traditional endoscopic surgery for benign prostatic obstrucion: A retrospective cohort study

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Aim of the study: The vast majority of prostatic cancer is currently detected by needle biopsy, nevertheless, the rate of incidental prostate cancer (IPC) after surgery for benign prostate obstruction (BPO) remains 4–16%. Even if transurethral resection of the prostate (TURP) is still considered the gold standard technique, several laser mininvasive techniques for prostate tissue ablation are currently available. These technologies differ from TURP in interaction with prostatic tissue, so that differences exist in the features of prostate specimens as well as in the amount of tissue for pathologic evaluation since an enucleation technique allow the ablation of a greater percentage of tissue. The primary aim of this study is to compare IPC incidence in TURP and holmium laser enucleation of the prostate (HOLEP).
Materials and methods: We retrospectively evaluated men undergoing HOLEP and bipolar TURP, having no clinical suspicion of prostate cancer or a recent negative prostate biopsy. Preoperative recordings include pharmacological therapy, TRUS prostate volume, PSA, PSA density (PSAD). We calculated the percentage of ablated tissue by means of postoperative TRUS evaluation of prostate volume. Diagnosis of IPC and its pathological stage and grade. The t-student test was used to compare normal variables, Wilcoxon test to compare non-normal variables, univariate and multivariate non-parametric regression to evaluate the association between IPC and preoperative features.
Results: 418 consecutive men underwent HOLEP (n = 140, 33.5%) or TURP (n = 278, 66.5%). HOLEP group had higher PSA (5.2 ± 5.7 vs 3.7 ± 4.1 ng/ml, p = 0.001) and prostate volume (96.5 ± 43.1 vs 62.5 ± 33.7 ml, p < 0.001), while no difference was found in PSAD (0.05 ± 0.06 vs 0.07 ± 0.1, p = 0.622). A higher percentage of tissue was ablated by HOLEP (51.8 ± 16.0 vs 40.6 ± 15.3%, p < 0.001). Overall, IPC was found in 27 men (6.5%), with a significant difference between the groups: 14/140 (10%) in HOLEP group and 13/278 (4.7%) in TURP group (X2 = 4.4; p = 0.037); there was no difference in distribution Gleason score and T-stage between the groups (X2 = 2.3; p = 0.526; X2 = 0.3; p = 0.704). Multivariate analysis showed that IPC is significantly associated with surgical technique (p = 0.047). Radiation therapy was given in 7 men of HOLEP group and 4 of TURP one while 5 patients of both the groups underwent radical prostatectomy. With a mean follow-up of 47.3 months, we recorded progression to metastatic stage only once, while 2 men died for non-cancer related causes.
Discussion: In our series, HOLEP was associated with a higher incidence of IPC. This different detection rate could be explained by the greater ablative power offered by an enucleation technique but we need further studies to evaluate whether the histological features of samples could facilitate the detection of IPC and, above all, to understand the clinical and oncological relevance of this increased detection rate.

SC17 MoLEP vs HoLEP: Preliminary data on prospectic randomized trial on the comparison standard HoLEP and MoLEP (HoLEP with moses technology)

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Aim of the study: Benign prostatic hyperplasia (BPH) is a common condition in older men. The treatment consists in ablation of prostatic tissue using a variety of techniques such as electrocautery, lasers, radiofrequency devices, microwave devices. Several techniques use laser energy to resect, enucleate or ablate hyperplastic prostate tissue. Holmium:Yttrium-Aluminium-Garnet (YAG; 2140-nm wavelength) laser is used for holmium laser enucleation of the prostate (HoLEP: H) technique. MoLEP (M) is a usage of HoLEP technique that endorse a modified laser pulse with Moses technology (Lumenis® MOSES Pulse120H). We are conducing this phase 3b study of HoLEP vs. MoLEP to expand the post-marketing data on safety and efficacy of MoLEP enucleation in BPH treatment.
Materials and methods: We are conducing an ongoing single center phase 3b study in men with moderate to severe BPH-associated symptoms refractory or intolerant to medical therapy or with acute or chronic urinary retention and prostate volume of >80 ml. Patients were excluded if they received previous surgery, there is a suspect of prostate cancer, there is an untreated urinary infection, there