be posed during the learning curve, avoiding to embark in the treatment of large adenomas before obtaining a good experience. Finally, this laser works with reusable fibers, which can help contain the costs of the procedure. No one can presently say if TURP is destined to vanish; probably this is not the case, but certainly more room is to be progressively yielded to laser treatments.

Reference
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7. #166: HYALURONIC ACID AND ADELMIDROL IN THE TREATMENT OF POST HOLEP IRRITATIVE SYMPTOMS

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Objective

Holmium laser enucleation of the prostate (HoLEP) is one of the most effective surgical modalities for BPH with many advantages over the historical gold standards open prostatectomy or transurethral resection of the prostate (TURP).
The efficacy of the treatment of symptoms related to BPH and the advantages related to laser technology in terms of good haemostasis, improving of urinary output and safety are well known. The most relevant side effects are represented by irritative disorders such as urgency, frequency, pain and post voiding dripping. To overcome these disorders, treatments with antimuscarinic and anti-inflammatory drugs or with "topical" intravesical drugs can reduce and improve the scenario, leaving time for normal tissue regeneration processes to act. We evaluated the efficacy of intravesical instillation of 0.1% sodium hyaluronate and 2% adelmidrol.

Materials and Methods

We reviewed retrospectively the data of 389 patients who underwent HoLEP for symptomatic BPH in our center between 2017 and 2021. Data of 18 patients who presented significant and persistent irritative disorders not responding to empiric antimuscarinic, anti-infiammatory and antibiotics treatment at 2 months from surgery were evaluated. Inclusion criteria for surgery were prostate size> 70 g evaluated with suprapubic ultrasound, Q Max <10 ml / sec, IPSS (0-35)> 19 and lack or poor response to alpha-lithic or intolerance at the same before being subjected to intervention. All patients received preoperative antibiotics prophylaxis or specific antibiotics therapy based on the results of positive urinary colture. HoLEP was performed with a three lobe technique by a single experienced surgeon. Clinical satisfaction of urinary output has been evaluated in all the case. All patients had negative urine culture before starting intravesical instillations. All patients received 6 instillations of hyaluronic acid once a week. All patients were re-evaluated at week 3 and week 6 during a follow-up visit with a post void residual (PVR) ultrasound assessment and a clinical evaluation. Side effects were reported in all the case.

Results

18 patients received 6 instillations of hyaluronic acid plus Adelmidrol once a week.
Urgency improves after 3 and 6 installations in 10 (55%) patients and 17 (94%)patients respectively. Pain symptom resolves in all the cases and in 12 (66%) patients post voiding dripping was still present after 6 instillation. Ultrasound PVR was regular in all the patients.
100% of the patients tolerated the treatment well. No urinary tract infection or acute urine retention were reported.

Discussions

HoLEP has been accepted as the most efficient method of transurethral surgery for benign prostatic hyperplasia.
Irritative symptoms after surgery represent in BPH laser surgery the main issue for minor complications. Surgeon experience and volume of procedures have been proven to reduce peri-operative complications. Adelmidrol is a member of the aliamide family, with similar anti-nociceptive and anti-inflammatory proprieties of PEA and as a PEA synthetic analogue, adelmidrol can increases endogenous levels of PEA(1). Recovering of the physiological level of PEA in the urothelium at the bladder neck and prostatic urethral enables the control of hyaluronic acid depolymerization from which it depends the ability of this polysaccharide to restore the urothelium coating integrity(2). Urothelium layer consists of glycosaminoglycans (GAGs): hyaluronic acid, chondroitin sulphate, heparan sulphate, and dermatan sulphate. GAGs coats the urothelium and damage of the GAGs layer allows the infiltration of urine with inflammatory action into the underlying layers and the consequent activation of mast cells (3) Mast cell hyper-activation can stimulate unmyelinated C fibers, leading to bladder pain. Hyaluronic acid (HA) is a mucopolysaccharide that promotes fibroblasts and endothelial cells proliferation enhancing the healing of tissues (4). HA therefore increases GAGs production, improves the permeability of the urothelium through the stimulation of the expression of tight junction proteins, decreases immune cell infiltration into the urothelium and then inhibits bladder mast cell activation (5). HA and adelmidrol determines a synergistic effect to restore the integrity of the urothelial tissue.

Conclusion

Intravesical instillations of hyalurinic acid and adelmidrol represent a good option for the treatment of post-HOLEP irritative disorders both in terms of therapeutic efficacy, tolerability and safety. Post voiding dripping represents the most difficult symptom to treat after HOLEP.

Reference
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8. #157: EFFECTS OF THE LASER SETTINGS ON PERI-OPERATIVE AND POST-OPERATIVE OUTCOMES IN PATIENTS WHO UNDERWENT TO HOLMIUM LASER ENUCLEATION OF THE PROSTATE (HOLEP). A SINGLE-CENTER EXPERIENCE

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Objective
Transurethral resection of the prostate (TURP) has been considered the gold standard in the treatment of benign prostatic hyperplasia (BPH) for the past 40 years. In the last decade, several authors demonstrated that HoLEP had several advantages. On the other hand, dysuria, frequency, sense of residual urine, sometimes accompanied by temporary overactive bladder were the most frequent postoperative symptoms. The aim of our study is to evaluate the effects of laser settings on peri-operative and post-operative outcomes.

Materials and Methods
We analyzed the data of 61 patients with BPH and LUTS resistant to medical treatment whose underwent HoLEP in our department from June 2019 to November 2021. All the procedures were performed by a single experienced surgeon. The enucleation was performed using Gilling's technique with a 120 W holmium laser machine (Lumenis Ltd, Israel), a 26 Fr continuous flow resectoscope (Karl Storz Endoscopy, Tuttlingen Germany) with a laser bridge, and a 550 μ end-firing holmium laser fiber. The patients were randomized into two groups, the first (Group 1) underwent HP (High Power)-HoLEP (80-100 W) and the second (Group 2) LP (Low Power)-HoLEP (30-40 W). Patients whose experienced perioperative complications were excluded from the study. Continence status, International Prostatic Symptoms Score (IPSS) score were evaluated after 1 month.

Results
50 patients met the inclusion criteria. Mean age was 63.2 years. Mean prostate size was 86.5 ml (54-182 ml). We found that mean Enucleation efficiency was 0.91 g/min (0.66-1.09 g/min) and 0.84 g/min (0.59-0.97 g/min), while morcellation efficiency was 3.99 g/min (3.59-4.29 g/min) and 3.74 g/min (2.59-4.35 g/min) for Group A and B, respectively. The difference was not significantly different between the 2 Groups ($p > 0.05$). Although Haemoglobin drop (g/dL) was found to be higher in LP Group, the difference was not statistically significant (0.70 for Group 1 vs. 0.74 for Group 2). Stress Urinary Incontinence (SUI) rates did not differ significantly after catheter removal (2% vs 3%; $p > 0.05$) and at the first month (1% vs 1%; $p>0.05$). Furthermore, Urge Urinary Incontinence (UUI) rates were lower in Group 2 both after catheter removal (8% vs 3%; $p< 0.05$) and at the first month (3% vs 1%; $p=0.03$). Finally, IPSS after catheter removal (17.3 vs 14.9; $p< 0.05$) and during the first month (9.1 vs 7.1; $p< 0.05$) were also significantly better in Group 2.

Discussions
HoLEP technique underwent various modifications over time and a standard procedure is yet to be defined and accepted (1). Traditionally, HoLEP has been performed using a high-power holmium laser of greater than 80 W. Rassweiller et al. noted that HoLEP could be performed using an intermediate-power 50 W holmium laser (2). Although power settings of 24 W and 40 W allowed safe enucleation, the authors reported a blood transfusion rate of 10% and 8% respectively. Moreover, operation time decreased by 27% when the power setting was increased from 24 to 40 W. These findings indicated that lower power settings increased the duration of surgery and frequency of blood transfusion requirement. Reuther et al. (3) reported that their outcomes for patients undergoing HoLEP at 50 W were comparable with traditional 100 W settings. The results of our study suggested that the postoperative haemoglobin drop was similar between the two Groups. In any case, we suggested combined haemostasis with a bipolar electrode in case of difficulty with haemostasis. Considering the efficiency of the procedure, Elshal et al. noted that LP-HoLEP was non-inferior to HP-HoLEP for all the parameters regardless of the level of surgeon expertise (4). Our data indicated that, despite HP settings increased Enucleation and Morcellation Efficiency, this difference is not statistically significant between the two groups. According to voiding parameters, many authors confirmed that, at higher frequencies, the Ho:YAG laser might act as a continuous wave laser increasing the photothermal effect and so the irritative symptoms (5). In our series, this was em-