Estimated blood loss (EBL) [200ml]. Hemoglobin change [2.8g/dL] and Hematocrit change [9%]; only 1 patient (3.0%) required one unit transfusion. Median length of stay (LOS) was 2 days. Clavien-Dindo complications were: 0 [21], I [7], II [3], IIIa [1], IIIb [1], IV and V [0]. Median resected prostate weight was 122g. Incidental prostate cancer was found in 3 (9%); one patient required radiotherapy. No patients were catheter-dependent post-operatively; mean post-void residual was 29ml (range 0 to 250ml).

CONCLUSIONS: EP-RASP is a safe and efficacious technique for the management of large adenomas, particularly when it is preferable not to enter the peritoneal cavity.

Source of Funding: None

V02-11
HOLMIUM LASER ENucleATION OF THE PROSTATE USING MOSES TECHNOLOGY IN TREATING BENIGN PROSTATE HYPERPLASIA
Makle Meskawi*, Marcelino Rivera, Rochester, MN

INTRODUCTION AND OBJECTIVES: Holmium laser enucleation of the prostate (HoLEP) is the most efficient and durable minimally invasive technique in treating men with lower urinary tract symptoms secondary to benign prostate hyperplasia (BPH) independent of prostate size. The Lumenis PulseTM 120 Holmium laser system, using Moses technology, was developed to optimize energy delivery through water to the target tissue. Ex-vivo studies showed more concise tissue incision and reduced collateral coagulation damage for Moses technology compared to the standard Holmium laser. Herein, we present our initial experience using Moses technology HoLEP in treating men with BPH.

METHODS: In September 2018, 15 patients were treated with Moses technology HoLEP. Treatment indications were in accordance with the American urological association (AUA) guidelines for the surgical management of BPH. Patient and surgical characteristics were recorded. Additionally, voiding symptoms were assessed using AUA symptoms score and uroflowmetry parameters. Full video of each procedure was obtained and edited using open source software.

RESULTS: The median age of our cohort was 72 years. Median and mean preoperative prostate volume were 92 and 84 gram, respectively. 8 out of 15 patients (53%) required intermittent or indwelling catheter drainage before the procedure. Median enucleation time was 44 minutes. 15 out of 16 patients were outpatient procedures. One patient stayed overnight due to social issues. First voiding trial was attempted the morning following the surgery (catheterization time less than 16 hours). First voiding trial was successful in 80% of patients (n=12). The remaining three patients had a successful second voiding trial two days later. None of the included patients required continuous bladder irrigation, overnight stay or emergency department visit due to bleeding complications, within 30 days after the procedure.

CONCLUSIONS: Moses technology HoLEP is safe when performed as an outpatient procedure with excellent hemostatic potential up to 150 gram prostate volume. Further studies are warranted to compare Moses technology to standard Holmium laser.

Source of Funding: None

V02-12
URETHRA AND EJACULATION PRESERVING ROBOT-ASSISTED SIMPLE PROSTATECTOMY: NEAR INFRARED IMAGING-GUIDED MADIGAN TECHNIQUE
Gabriele Tuderti*, Leonardo Misuraca, Umberto Anceschi, Maria Consiglia Ferriero, Salvatore Guaglianone, Francesco Minisola, Aldo Brassetti, Rocco Simone Flammia, Riccardo Mastroianni, Michele Gallucci, Giuseppe Simone, Rome, Italy

INTRODUCTION AND OBJECTIVES: With the increasing adoption of novel techniques, the surgical management of benign prostatic hyperplasia (BPH) provides significant benefits in terms of obstruction relief, early catheter removal and faster return to daily activities. However, the main pitfall of BPH surgery in sexually active men remains ejaculatory dysfunction (ED). In this video we described a novel technique for marking intraprostatic urethra through a retrograde injection of indocyanine green (ICG) to enhance a selective dissection of prostatic lobes during urethra-sparing robot-assisted simple prostatectomy (US-RASP) with the use of Near Infrared Fluorescence Imaging (NIFI).

METHODS: Between January-September 2017, 12 consecutive patients with BPH, sexually active and motivated to preserve ejaculatory function, underwent US-RASP.

The first step was a retrograde injection of 10 mL of ICG through the urethral catheter placed at navicular fossa. Once prepared the Retzius space the bladder neck was meticulously isolated in order to expose the proximal prostatic urethra.

BPH dissection started from the right lobe, developing the dissection plane starting from the base and progressively moving to 12 o’clock site. Sharp and blunt dissection were progressively used to enucleate the lobe. NIFI imaging was used when dissection moved towards the median aspect of the lobe in order to improve visualization of the bladder neck and of the urethra, to avoid any unintended violation of urinary tract.

Energy free dissection was used in proximity to urinary tract. Once completed the resection, a Foley catheter was introduced and the cuff inflated in the prostatic urethra with 10 mL of saline solution. Finally, the bladder was approximated to the prostatic fossa with two running monocryl sutures. Clinical data were prospectively collected into our institutional RASP dataset. Perioperative and functional outcomes of US-RASP were both graded and assessed according to Clavien Grading System and validated questionnaires postoperatively (IPSS; MSHO-EjD Short Form) at 3.12 months.

RESULTS: Median preoperative prostate size was 102 cc (IQR 88-115). Median operative time was 150 minutes (IQR 145-170). Median estimated blood loss was 250 (IQR 200-350). Continuous bladder irrigation was avoided in 83.4% of patients. Median time to catheter removal was 7 days (IQR 7-7) with a median hospital stay of 3 days (IQR 2-3). At 1-yr follow-up median IPSS score, IIEF score and MSHO-EjD Short Form were 5 (IQR 4-8), 26 IQR 26-28 and 12 (IQR 1-14), respectively. A satisfactory antegrade ejaculation was reported in 8 patients (66%).

CONCLUSIONS: We first described a novel NIFI-guided technique to perform US-RASP. This technique showed promising early functional results suggesting a significant role of intraprostatic urethral integrity for the preservation of ejaculatory function.

Source of Funding: none

Stone Disease: Medical & Dietary Therapy
Moderated Poster 12

Friday, May 3, 2019 1:00 PM-3:00 PM

MP12-01
RELATIONSHIP BETWEEN DAILY WATER INTAKE AND 24-HOUR URINE VOLUME IN ADOLESCENTS WITH KIDNEY STONES
Joshua Bernard*, Lihai Song, Brittany Henderson, Philadelphia, PA; Steven Warner, San Diego, CA; Gregory Tasson, Philadelphia, PA

INTRODUCTION AND OBJECTIVES: Maintaining a high urine output is important to decrease kidney stone recurrence. However, the precise relationship between fluid intake and urine output is unknown and data to support clinical recommendations for water intake to reach urine output goals are lacking. We developed a model to estimate the change in 24-hour urine volume from daily water intake volume among adolescents with kidney stones.

Source of Funding: None