

need for prolonged catheterization and blood transfusion. Robot-assisted simple prostatectomy has been shown to mitigate these sequelae albeit in relatively small case series.

METHODS: Our patient was a 66 year-old male who presented with a history of bothersome lower urinary tract symptoms. His preoperative IPSS was 22 and uroflowmetry demonstrated a peak flow of 8ml/sec. 12-core transrectal ultrasound guided biopsy was negative and ultrasound estimated volume was 138mL. The technique demonstrated is a transperitoneal hybrid approach of urethrovaginal anastomosis with the posterior urethral plate reapproximated to the posterior bladder neck, coapting much of the prostatic fossa.

RESULTS: Operative time was 3hr 17min. The final specimen was 154 grams. Estimated operative blood loss was 110mL and the patient's post-operative hemoglobin dropped 1.3 g/dL. The patient was discharged from the hospital postoperative day 2 and transurethral catheter was removed after 7 days. At 4 months, the patient was found to have had a 12-point decrease in IPSS. He is doing well, with no sign of recurrent flow obstruction at 8 months of follow-up.

CONCLUSIONS: Robot-assisted simple prostatectomy is technically feasible and represents an alternative to open simple prostatectomy or endourologic approaches, especially for large adenomas.

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V1028

ROBOTIC SUPRAPUBIC PROSTATECTOMY FOR SEVERE BENIGN PROSTATIC HYPERPLASIA

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INTRODUCTION AND OBJECTIVES: Conventional treatment of BPH includes α -1 adrenergic antagonists, 5 α reductase inhibitors, and minimally invasive procedures including TUMT and TUNA. Men with urinary retention, recurrent UTIs, prostate hemorrhage, bladder calculi, renal insufficiency, and/or symptoms unresponsive to medical therapy may be appropriate candidates for TURP or open prostatectomy. Compared to TURP, open prostatectomy offers a lower retreatment rate, more complete removal of the prostatic adenoma under direct vision, and avoids the potential for TURP syndrome. However, open prostatectomy is associated with an increased risk of perioperative hemorrhage and the need for a longer hospitalization and convalescence. Many of the aforementioned disadvantages with open prostatectomy were likewise common with radical retropubic prostatectomy before the advent of robotics. We present our experience with robotic suprapubic prostatectomy for the treatment of severe BPH.

METHODS: A 66 year old male presented with BPH refractory to medical therapy. Preoperative AUA symptom score was 26 and postvoid residual volume was 375cc. Maximum voiding flow rate preoperatively was 7.2mL/sec. The patient underwent transrectal ultrasound with a calculated volume of 175g. Treatment options were discussed with the patient in detail. Following informed consent, robotic suprapubic prostatectomy was performed. With the patient in the lithotomy position, a conventional 5 port configuration was employed. The bladder was dropped and the space of Retzius developed. The bladder was filled and a cystotomy created. The adenoma was circumferentially enucleated using blunt and sharp dissection. The enucleation bed was rendered hemostatic with pinpoint cautery. The incised mucosa of the posterior bladder neck was tacked to the prostate capsule using a running 3-0 Vicryl suture. The cystotomy was closed in multiple layers using absorbable suture.

RESULTS: Operative time was 123 minutes. Estimated blood loss was 50cc. There were no acute intraoperative or postoperative complications. Postoperative postvoid residual volume was 23cc. Postoperative AUA symptom score was 3.

CONCLUSIONS: Based on our experience, robotic simple prostatectomy is safe, effective, and minimizes many of the disadvantages traditionally associated with the open approach. The decision to approach the prostate through a suprapubic or retropubic approach is

predicated on patient factors and the discretion of the operating surgeon. Further study is needed to determine the appropriate patient selection, efficacy and/or superiority as compared to TURP.

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V1029

INTRAOPERATIVE VASCULAR INJURIES: INADVERTENT AND PREVENTABLE!

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INTRODUCTION AND OBJECTIVES: Intraoperative vascular injuries are reported in approximately 1.5% of major urological laparoscopic procedures and may need conversion. Although some of these are accidental, others happen due to improper or poor knowledge of instrumentation and technique, and are thus preventable. We present two such vascular injuries.

METHODS: In the first instance, during left renal hilar dissection for a partial nephrectomy, the surgeon tried to dissect behind the renal vein by holding and retracting an already applied Weck® clip on a lumbar vein. The pull on the clip resulted in avulsion of the lumbar vein from renal vein. The resulting hole was difficult to hold due to its posterior location. An additional port was used to temporarily clamp an accessory and main renal artery. The defect in thus collapsed renal vein could then be grasped and repaired with prolene 5-0 suture. The procedure could be completed without the need for conversion. In the second procedure, the surgeon created a hole at the junction of the renal artery and aorta during laparoscopic donor nephrectomy while trying to cut a flimsy attachment of the renal vein with the harmonic scalpel (HS). He was trying to release the broad renal vein to enable its rotation to reach a lumbar vein coursing posteriorly across renal artery. Harmonic ACE® was used at a setting of 5 for five seconds. With bleeding kept in control under vision with a surgical pack and pressure, the procedure was converted to open for safe completion.

RESULTS: Self locking ligature clip from Weck (Hem-o-lock) holds the vessel firmly with its teeth and is unlikely to slip. Any attempt at holding an applied clip to retract may result in avulsion of the held vessel. HS, with its ability to coagulate and dissect close to vital organs, is extensively used without the risk of electrical injury. It has been described to achieve its surgical effect by providing temperatures below 100°. However, heat generation depends on many factors, like power setting and application time, apart from the amount of tissue held between blades. Little or no tissue between blades may generate very high blade temperatures (called the abuse mode). Continuing to fire HS while little or no tissue between distal part of the blades, despite a small amount of tissue still held by the proximal end, may also result in abuse mode. Temperatures >200°C have been recorded using harmonic ACE, high enough to cause injury to organs in direct touch of the tip.

CONCLUSIONS: Ligature clips and HS are safe and commonly used. One needs to know the proper technique and basics of technologies to enable their safe use.

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V1030

LAPAROSCOPIC TRANSPERITONEAL ANDERSON-HYNES PYELOPLASTY: TECHNICAL NOTES AND RESULTS AFTER 100 CASES

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INTRODUCTION AND OBJECTIVES: The laparoscopic Anderson-Hynes pyeloplasty is the gold standard for the treatment of the pyeloureteral junction obstruction (PUJO). We described the surgical steps of laparoscopic Anderson-Hynes pyeloplasty with transperitoneal

approach and anterograde stent placement done using a personal technique. We reported the morphofunctional results after the first 100 cases.

METHODS: Between March 2005 and December 2010, 100 patients, 47 males, 53 females (mean age 31, range 15-59) diagnosed with incidental or symptomatic PUJO, underwent transperitoneal laparoscopic Anderson-Hynes pyeloplasty. In 11(11%) cases, a transmesocolic access to the PUJ was adopted. In all patients surgery was performed using 3 to 5 ports, a 12 mm umbilical/ paraumbilical port for Hasson trocar and the remaining were all 5 mm ports. The placement of an anterograde double J ureteral stent was performed using a personal technique after posterior anastomotic wall closure. The anastomosis was done with 5-0 Vicryl sutures.

RESULTS: All operations were completed laparoscopically, and no open conversions were needed. The mean operative time was 120 min (range 90-390). For the last 30 cases the operative time was always less than 120 minutes. Overall, 19 patients (19%) had an abnormal blood vessel that required a transposition in 15 (15/19, 79%). 9 patients (9%) had kidney stones associated. The average time for ureteral stenting was 5 min (range 3-22 min), and in 99 cases (99/100, 99%) it was correctly positioned. The average postoperative hospitalization stay was 4 days (range 3-10). 4 postoperative complications occurred (4%): two patients required prolonged surgical drainage, one had bronchopneumonia, one had intrahepatic bleeding of an subcapsular hemangioma, treated conservatively without blood transfusion needing.

At a mean follow-up of 36 months (range 1-72) we showed a 97% success rate, documented as a morphofunctional improvement, with absence or reduction of hydronephrosis in asymptomatic patients. A persistent PUJO was detected in three patients and was treated by conservative endoscopic management or by performing an open/laparoscopic pyeloplasty.

CONCLUSIONS: Our data confirm the antegrade procedure to be an easy-to-learn and safe. It obviates the problem of having the stent in the renal pelvis during dissection and suturing and of repositioning the patient onto the flank for the laparoscopic procedure.

Our study confirms the effectiveness of the laparoscopic technique, in terms of morphofunctional and clinical symptoms resolution, with a high overall success rate (97%).

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V1031

ROBOTIC-ASSISTED LAPAROSCOPIC URETERAL REIMPLANTATION WITH PSOAS HITCH

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INTRODUCTION AND OBJECTIVES: We present our initial experience in robotic-assisted laparoscopic ureteral reimplantation with psoas hitch.

METHODS: In this case-study, a 50 year old female patient has been diagnosed with ureteral stenosis after having a hysterectomy. We position the patient supine with a slight trendelenburg tilt. The camera port is placed 2 cm superior to the umbilicus with two robotic trocars placed laterally. An assistant port is placed in the iliac fossa. We start the procedure with an incision in the posterior parietal peritoneum. We locate the ureter and dissect it at the point of the stenosis. The ureter is clipped and divided. We dissect the anterior and lateral walls of the bladder, ensuring that it can later be anchored to the psoas muscle. The ureter is spatulated. A double J stent is inserted into the ureter through the assistant trocar. We hitch the bladder to the psoas using 3 polyglactin (teen) sutures. An incision is made in the muscular layer of the selected area of the bladder, sparing the mucosa. The superior sutures must include all of the layers of the bladder and ureteral walls. The inferior and lateral sutures must only include the ureter and the

bladder mucosa. We complete the reimplantation with several sutures in the bladder muscle, enclosing the ureter between the muscular layer and the mucosa. A drain tube is placed.

RESULTS: In this case, surgical time was 100 minutes and the hospital stay 4 days. No intra or post-operative complication occurred.

CONCLUSIONS: Robotic-assisted laparoscopic ureteral reimplantation with psoas hitch is a feasible and reproducible procedure.

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V1032

DOUBLE BUCCAL MUCOSA GRAFT-AUGMENTED PERINEAL URETHROPLASTY IN TIGHT BULBAR URETHRAL STRICTURES

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INTRODUCTION AND OBJECTIVES: The optimal management of bulbar urethral strictures is controversial. Augmented urethroplasty is a widely-used strategy due to the advantages of preserving the urethral plate and avoiding unnecessary urethral mobilization and transection of spongiosum vascularity. Combined anterior+posterior double buccal mucosa grafting (dBMG) has been favored in particularly narrow strictures since it offers the possibility of creating a wider-caliber urethral lumen. We present our technique and results with dBMG in narrow bulbar urethral strictures.

METHODS: Fifteen patients (mean age: 37 years, range: 23-65) with bulbar urethral strictures were treated with dBMG-augmented perineal urethroplasty between 2006 and 2011. All patients were cytostomized and had undergone at least one prior endoscopic treatments (mean: 3.8 times, range: 1-9) and multiple dilatations. The stricture was evaluated with preoperative retrograde urethrogram+antegrade cystogram, and intraoperative radiographic assessment of the defect between the tips of 2 Benique sounds advanced through the cystostomy tract and urethra. Mean stricture length was 3 cm. (range: 1.5-4 cm). The operation stages were: reverse Y incision, separation of bulbocavernosus muscles, ventral sagittal urethrotomy and entry of strictured urethra, midline incision of the dorsal urethra down to tunica albuginea and dissection of incision margins to provide bed for the BMG. The first BMG was quilted to the corpus cavernosum as dorsal inlay and second BMG was sutured to the margins of the ventral urethral incision as onlay, followed by approximation of bulbocavernosus muscles over the urethra. A 16-18F catheter was left for 2 to 3 weeks. Retrograde urethrograms were routinely obtained 4 weeks after catheter removal, and cystoscopy was performed in the presence of obstructive symptoms. Failure was defined as any need for postoperative intervention, including urethrotomy or dilatation.

RESULTS: With a mean follow-up of 28 months (range: 6-56), 13 (86.6%) procedures were successful. Two patients required internal urethrotomy due to re-stricture of less than 1.5 cm. All patients were free of their cystostomy at the last follow-up, and mean postoperative peak urinary flow rate was 19.2 ml per second (range: 14-32).

CONCLUSIONS: Combined dBMG urethroplasty is a viable option for reconstructing tight bulbar urethral strictures in terms of preserving the urethral plate and its vasculature, and enabling the formation of a physiological, wide-caliber urethra.

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V1033

ROBOT-ASSISTED RETROPERITONEAL LYMPH NODE DISSECTION: MODIFIED NERVE-SPARING LEFT SIDED TEMPLATE

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INTRODUCTION AND OBJECTIVES: Due to the inherent difficulty with dissection, laparoscopic retroperitoneal lymph node dissection (RPLND) is not considered standard treatment for patients with