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#### **Oral Presentations**

#### Aftercare of living donor in kidney transplantation

Yazid Abdessemed<sup>a, \*</sup>, Mounir-Brinis Nedjma<sup>a</sup>, Bourenane Haithem<sup>a</sup>, Chinar Athmane<sup>a</sup>, Missoum Soumia<sup>a</sup>, Houssem Eddine Ouarhlent<sup>a</sup> a Nephrology Department Beni Messous University Hospital, Issad Hassani Hospital, Algiers, Algeria.

**Background:** Due to the discrepancy between the increasing need of kidneys for transplantation and the continuously low numbers of donors, the possibility of living donor kidney transplantation is gaining importance. An expansion of selection criteria for donors already exists to manage the current shortage. An evaluation of risk factors for living donors should be investigated to improve this issue.

**Methods:** The statistics of the first Algerian center of kidney transplantation from living donor (617 living donors) were evaluated, and compared long-term renal function and cardiovascular and all-cause mortality in living kidney donors compared with a control group of individuals who would have been eligible for donation. The fundamental references in the literature and expert opinions are discussed.

Results: All-cause mortality, cardiovascular mortality, and end-stage renal disease (ESRD) was evaluated in 617 living donors during 2014 through 2022 with a median follow-up of 4.2 years. A control group of 500 potentially eligible kidney donors was selected, with a median follow-up of 07 years. Hazard ratio for all-cause death was significantly increased to 1.30 (95% confidence interval 1.11–1.52) for donors compared with controls. There was a significant corresponding increase in cardiovascular death to 1.40 (1.03–1.91), while the risk of ESRD was greatly and significantly increased to 11.38 (4.37–29.6). The overall incidence of ESRD among donors was significantly increased and might have been influenced by hereditary factors. Immunological renal disease was the cause of ESRD in the donors. Thus, kidney donors are at increased long-term risk for ESRD, cardiovascular, and all-cause mortality compared with a control group of nondonors who would have been eligible for donation.

**Conclusion:** Living donor kidney transplantation is an excellent option for patients with end-stage kidney failure. Whatever a thorough evaluation of potential donors and their aftercare is indispensable.

Correspondence to: Yazid Abdessemed, Nephrology Department Beni

Messous University Hospital, Issad Hassani Hospital, Algiers, Algeria. Email: soumia\_missoum@outlook.fr

## Diagnostic value ultrasound signs of stones $\leq 10$ mm and clinico-radiological variants of ureteric colic as a possible classification

Denis Krakhotkin<sup>a, \*</sup>, Volodymyr Chernilovskyi<sup>a</sup>, Kemal Sarica<sup>a</sup>, Arman Tsaturyan<sup>a</sup>, Evangelos Liatsikos<sup>a</sup>, Jurijus Makevicius<sup>a</sup>, Nikolay Iglovikov<sup>a</sup>, Dmitry Pikhovkin<sup>a</sup>

<sup>a</sup> Central District Hospital, Outpatient Clinic, Sadovaya Lane 23, Kamenolomni, 346480, Rostov Region, Russia.

**Background:** Renal colic due to ureteric stone obstruction is one of most common abdominal pain type in the emergency departments (ED). In this study we aimed to determine the diagnostic value of ultrasound signs of urinary stones less than or equal to 10 mm and to determine clinico-radiological variants of ureteric colic.

Methods: A total of 455 ultrasound investigations were performed in patients referring to emergency department with urolithiasis and symptoms suspected of ureteric colic between January 2021 and May 2021. In addition to microscopic evaluation of urine sediment to detect different crystals and non-contrast spiral computed tomography to detect stones, B-mode and color Doppler sonography was performed to assess the presence of acoustic shadow (AS) and twinkle artifacts (TA) as possible signs of stone(s) in ureter.

Results: While the sensitivity and specificity of AS and TA were higher than 90% in patients with stones greater than 5 mm; positive prognostic values of these parameters were found to be extremely low for stones with sizes of 1–3 mm with specificity and sensitivity values not exceeding 53%. The sensitivity and specificity of AS and TA in the upper and lower ureters were higher for stones greater than or equal to 5 than for compared to those less than 5 mm. At the same time, the diagnostic values of TA and AS for middle ureter stones were very limited. The most prevalent clinico-radiological variants of ureteric colic were types I, III, and V being observed in 39%, 28% and 21% cases, respectively.

Conclusion: Our results demonstrate that TA and AS parameters seem to have a very low sensitivity and specificity in the diagnosis of urinary stones less than 5 mm. The diagnostic value of TA and AS increase significantly in stones greater than or equal to 5 mm. Therefore, clinicians need to be very careful for overestimating the diagnostic values of TA and AS for stones less than 5 mm and non-

contrast spiral computed tomography must be the method of choice for patients presenting to emergency department with ureteric colic.

Correspondence to: Denis Krakhotkin, Central District Hospital, Outpatient Clinic, Sadovaya Lane 23, Kamenolomni, 34 6480, Rostov Region, Russia.

Email: den\_surgeon@mail.ru

#### Argon beam coagulation versus suture renorrhaphy for hemostasis of tumor bed in laparoscopic partial nephrectomy: prospective randomized comparative study

Aly M. Abdel-Karim<sup>a</sup>, Ahmed M. Bakr<sup>b, \*</sup>, Mustafa A. Shama<sup>b</sup>, Mokhtar A. Metawee<sup>b</sup>, Ahmed I. El-Sakka<sup>b</sup>

**Background:** Preservation of functional renal parenchyma is one of the main targets of partial nephrectomy (PN) of renal tumors. Sutures could devitalize part of the functional renal tissue in the tumor bed, by applying chronic local ischemia or inducing a fibrogenic tissue reaction. We aim to assess the functional outcomes after substituting the medullary layer of the renorrhaphy by argon beam coagulation (ABC).

Methods: 37 patients with unilateral cT1 renal masses were included into a prospective randomized trial. All patients had laparoscopic PN. After tumor excision, Group 1 (G1) had ABC of tumor bed replacing part of the sutures, while Group 2 (G2) had a conventional 2-layer renorrhaphy. Glomerular filtration rate has been estimated (eGFR) at 0, 1-month, and 3-months post-PN. Urine levels of transforming growth factor beta 1 (TGFb1) were measured at 0, 1, and 30 days post-PN to indicate the fibrogenic process post-PN. Patients were followed for 3 months

**Results:** The average age of patients was  $52 \pm 11.1$  years, average tumor size was 40.3 ± 13.4 mm, mean RENAL score was  $6.2 \pm 2.1$ , and the mean baseline eGFR was 73 ± 26.4 mL/min. Groups were comparable in patient and tumor parameters. The median number of sutures was 10 in G1 and 21 in G2. Ischemia time was slightly shorter in G1 vs. G2 (14.3  $\pm$  5.2 min vs. 17.7  $\pm$  8.5 min, P = 0.17), otherwise there were no differences in operative, postoperative or oncologic outcomes. G1 showed higher eGFR at 3 months (73  $\pm$  19 vs. 60  $\pm$  11 mL/min, P = 0.006), less changes in eGFR from baseline (-0.4  $\pm$  20.5 vs. -13  $\pm$  16.8 mL/min, P = 0.01), more improvement in eGFR after 1 month (15  $\pm$  8 vs. -7  $\pm$  11 mL/min, P < 0.001). Levels of TGFb1 was lower in G1 vs. G2 at 30-day post-PN (15.2  $\pm$  7.7 vs. 37  $\pm$  19.9 ng/mL, P = 0.007), and its levels were correlated with unfavorable eGFR changes.

Conclusion: Preserving functional renal parenchyma and reducing fibrogenic tissue reaction could outweigh the effect of ischemia time on functional outcomes post-PN. Reducing number of sutures has positive effect on short-term eGFR changes and is associated with less fibrogenic healing at tumor bed post-PN. TGFb1 levels in urine, as an indicator for fibrosis, correlate with unfavorable renal function at 3-month post-PN.

Correspondence to: Ahmed M. Bakr, Suez Canal University, Ismailia, Egypt.

Email: ambakr@med.suez.edu.eg

## Use of continuous irrigation modified hysteroscope for transurethral pneumatic cystolithotripsy of giant bladder stones

Essam Shalaby<sup>a,\*</sup>, M. Saleh<sup>a</sup>

**Background:** The endoscopic treatment of large bladder stones is challenging. It can be performed via transurethral or percutaneous approach. Mechanical or laser lithotripsy can be used but consume long time for complete stone disintegration and clearance. Instrumentation is a pivotal factor in the outcome of cystolithotrpsy.

**Methods:** A modified 21-french hysteroscope with continuous irrigation was used for transurethral lithotripsy of bladder stones larger than 3 cm. Adult patients with normal urethra were included. Primary outcomes were lithotripsy time, stone-free rate (SFR) at time of discharge, and rate of urethral stricture (USD). Patients were followed for  $\geq 6$  months.

**Results:** Seventy-five patients were included. Male to female ratio is 4:1. Mean stone size was 54 mm. Lithotripsy time was  $21.1 \pm 4$  min. SFR was 100%. No USD in the follow up duration (median 20 months). Struvite (19.3  $\pm$  3 min), followed by calcium stones (18  $\pm$  2.2 min), consumed the longest time.

**Conclusion:** The Modified 21-french hysteroscope with continuous irrigation enhanced energy delivery to the stone, and reduced time needed to achieve stone clearance, with no increase in rate of USD. Stone type and size can predict the lithotripsy time.

Correspondence to: Essam Shalaby, Suez Canal University, Ismailia, Egypt.

Email: ambakr87@gmail.com

## Identifying the specific causes of kidney allograft loss: a population-based study

Houssem Eddine Ouarhlent<sup>a, \*</sup>, Brinis Nedjma<sup>a</sup>, Bourenane Haithem<sup>a</sup>, Abdessemed Yazid<sup>a</sup>, Missoum Soumia<sup>a</sup>, Chinar Athmane<sup>a</sup>

<sup>a</sup> Urologie CHU de Batna Algérie.

**Background:** Results of kidney transplantation have been improving but long-term allograft survival remains disappointing. The objective of the present study was to identify the specific causes of renal allograft loss, to assess their incidence and long-term outcomes.

**Methods:** A total of 674 patients transplanted between 2014 and 2023 in the first Algerian center for kidney transplantation from living donor, were retrospectively included. We analyzed donor and recipient clinical and biological parameters as well as anti-HLA antibody directed against the donor were included. The main outcome was the long-term kidney allograft survival, including the study of the associated causes of graft loss, the delay of graft loss according to their causes and the determinants of graft loss.

<sup>&</sup>lt;sup>a</sup> Alexandria University, Alexandria, Egypt.

<sup>&</sup>lt;sup>b</sup> Suez Canal University, Ismailia, Egypt.

<sup>&</sup>lt;sup>a</sup> Suez Canal University, Ismailia, Egypt.

Results: There were 29 graft losses during the follow-up period (median time: 4.51 years) with an identified cause in 97.08%. Kidney allograft survival at 7 years post-transplant was 88%. The causes of allograft loss were: antibody-mediated rejection (45%), medical intercurrent disease (22.2%), recurrence of primary renal disease (10.8%), BK- or CMV-associated nephropathy (12.78%), calcineurin inhibitor nephrotoxicity (9.5%), and indetermined (2.92%).

**Conclusion:** The main causes of allograft loss were antibody-mediated rejection and thrombosis. These results encourage efforts to prevent and detect these complications earlier in order to improve allograft survival.

Correspondence to: Houssem Eddine Ouarhlent, Urologie CHU de Batna Algérie.

Email: soumia\_missoum@outlook.fr

Utilizing of trans urethral laser ablation (TULA) in non-muscle invasive bladder cancer as outpatient: tolerability, efficacy, safety, and economic benefits

Moaz Abdelrahman<sup>a,</sup>

<sup>a</sup> Department of Urology East Lancashire Hospitals NHS trust United Kingdom, UK.

**Background:** Trans urethral laser ablation is used for management of non-muscle-invasive bladder cancer. It can be done under local anesthetics as outpatient especially in elderly patients with significant co morbidities. The aim of this study is to determine efficacy, safety, cost effectiveness, and patient's satisfaction.

**Methods:** We performed prospective study of 50 patients with NMIBC treated with TULA between January and July 2023. We assessed tolerability using numerical pain scale. We followed up the patients looking for any complications to assess safety and efficacy. We compared the cost of TULA to the cost of tumor resection under GA.

**Results:** We found low Complication rates: dysuria (3.5%) frequency (2%), and hematuria (1.5%) with no episodes of bladder perforation. Numerical analogue pain scores were low. The overall patient satisfaction was 100%.

**Conclusion:** The study demonstrates good efficacy in elder patients with significant co morbidities. The procedure is well tolerated with low complication rate. The procedure could save a lot of money compared to tumor resection as inpatient surgery.

Correspondence to: Moaz Abdelrahman, Department of Urology East Lancashire Hospitals NHS trust United Kingdom, UK.

Emial: mai moaaz@yahoo.com

## Low anterior access for retroperitoneal single-port robotic partial nephrectomy

Nicolas Soputro<sup>a, '</sup>, Ethan L. Ferguson<sup>a</sup>, Roxana Ramos-Carpinteyro<sup>a</sup>, Jaya S. Chavali<sup>a</sup>, Jihad H. Kaouk<sup>a</sup>

<sup>a</sup> Glickman Urological & Kidney Institute, Cleveland Clinic, USA.

**Background:** Low anterior (or Pfannenstiel) incision has been shown for its benefits in enhancing postoperative recovery, reducing postoperative pain, as well as reducing

the risk of respiratory-related complications by minimizing disruptions on accessory respiratory muscles. There remains a paucity of evidence, however, on its utility in retroperitoneal partial nephrectomy due to concerns surrounding the distance to target anatomy and limited working space within the retroperitoneum. This video aims to demonstrate the feasibility and early outcomes of this novel approach using the purpose-built Single-Port (SP) robotic platform.

**Methods:** In this video, we present a case of a 69-yearold man with a cT1a left upper pole renal mass that underwent a partial nephrectomy using the Da Vinci SP robotic system. Direct retroperitoneal access was obtained via a 3 cm low anterolateral abdominal incision. After incising the transversalis fascia, blunt dissection was performed to develop a space above the peritoneum for the insertion of the purpose-built SP Access Port. Perioperative outcomes were evaluated for this patient and the additional three patients that constituted our initial series (n = 4).

**Results:** The procedure was completed successfully without the need for conversion or additional ports. The operating time was 2.5 h with a warm ischemia time of 25 min and an estimated blood loss of 15 mL. There were no intraoperative or postoperative complications. The patient was discharged 6.5 h following the completion of his surgery without requiring any opioid analgesia, both as an inpatient and on discharge. Similar outcomes were achieved in the other cases, with our technique being reproducible for anterior, posterior, and laterally-located tumors.

Conclusion: The improved maneuverability of the SP robotic platform has allowed for robotic partial nephrectomy to be safely and effectively performed with direct access to the retroperitoneum via a low anterior abdominal incision for any tumor location. The technique facilitated enhanced postoperative recovery with all patients being discharged within 24 h without any opioids nor clinical sequelae.

Correspondence to: Nicolas Soputro, Glickman Urological Kidney Institute, Cleveland Clinic, USA.

Email: soputrn@ccf.org

## 10 years and 1200+ robot-assisted radical prostatectomies—functional results depending on surgical experience

M. Georgiev<sup>a, \*</sup>, K. Yanev<sup>a</sup>, Y. Semerdzhiev<sup>a</sup>, M. Kolev<sup>a</sup>, V. Bojchev<sup>a</sup>, S. Angelov<sup>a</sup>, R. Gergov<sup>a</sup>, A. Georgiev<sup>a</sup>

<sup>a</sup> Alexandrovska University Hospital, Clinic of Urology, Department of Urology, Medical University of Sofia "Doverie" Hospital, Bulgaria.

**Background:** The target of the study was to retrospectively analyze how our surgical technique over a 10-year period in 1200 patients affected functional outcomes.

**Methods:** From 03.2013 to 08.2023, we have performed over 1200 RARP. In 651 (54%) we preserved the neurovascular bundle bilaterally by an antegrade technique, in 271 (22.5%) by retrograde or combined, and unilaterally in 200 (17%). In the remaining 278 (23%) patients a wide incision was performed. In all patients, we ligated the dorsal venous complex (DVC) at the beginning of the

operation, except in cases where this was impossible due to apical adhesions. We apply an anterior reconstruction with suspension sutures as well as a posterior Rocco reconstruction. In all patients, the anastomosis was made by the Van Velthoven technique.

Results: The percentage of continence achieved during the first 300 cases is as follows: 1 month-35%, 3 months-68%, 6 months-71%, 12 months-89%. Continence after 300-800 cases: 1 month-65%, 3 months-88%, 6 months-92%, 12 months-95%. Continence after 800-1000 cases per 1 month-85%, 3 months-92%, 6 months-95%, 12 months-98%. Continence after removing the catheter within 1-7 days: first 300 cases-5%, 300-800 cases-31%, 800-1000 cases-59%, 1000-1200 cases-71%. Recovery of erectile function is as follows: first 300 cases-1 month 0%, 3 month-5%, 6 month-12%, 12 month-31%. Erectile function restored after 800-1000 cases is much higher: 1 month-5%, 3 month-25%, 6 month-35%, 12 month-67%.

Conclusion: The refinement of surgical techniques, dissection of the neurovascular bundles with "neurosurgical precision" with energy- and traction-free technique for dissection, meticulous preparation of urethra to achieve maximum length in combination with maximum preservation of periurethral tissues, the accumulation of surgical experience are factors determining better functional and oncological outcomes after RARP. The road to achieving better results is long, with many obstacles and never ends.

Correspondence to: M. Georgiev-Bolgharia, Alexandrovska University Hospital, Clinic of Urology, Department of Urology, Medical University of Sofia "Doverie" Hospital, Bulgaria.

Email: marinbg64@gmail.com

#### Salvage RARP in locally advanced prostate cancer

Semerdzhiev  $Ya^{a, \dot{}}$ , Kolev  $M^a$ , Gergov  $R^a$ , Boychev  $Vl^a$ , Angelov  $St^a$ , Georgiev  $A^a$ , Hinkov  $P^a$ , Yanev  $K^a$ , Georgiev  $M^a$ 

<sup>a</sup> Departments of Urology and Pathology (NM), Long Island Jewish Medical Center, New Hyde Park, New York, USA.

**Background:** The objective of our study is to determine the impact of RARP in patients with locally advanced disease

Methods: For the period 01/01/2023 - 08/15/2023, 178 RARPs were performed in the Department of Urology of Doverie Hospital in patients with prostate cancer (PC). If extracapsular invasion was suspected, a wide excision was performed intraoperatively on the suspected side. Particular attention was paid to preserving the maximum length of the urethra regardless of suspicion for extracapsular disease. Preoperative imaging studies for prostate carcinoma staging, type of neurosparing surgery, PSA values before and after surgery were monitored. Perioperative complications, functional outcomes of operative treatment, and final pathoanatomic outcomes were analyzed.

**Results**: Seven (4%) of patients had evidence of locally advanced disease from preoperative imaging studies. In 53 (29%) of patients stage T3 was established by final histology. In 37 (70%) of patients, the intraoperative suspicion of extracapsular extension coincided with the final histology finding. Three (6%) of patients final histology

showed positive surgical margins in the neurovascular bundle area. None of the patients had positive surgical margins in the apex region. No statistically significant differences were found in the monitored parameters in the patients with organ-limited and locally advanced disease, except for the preservation of erectile function.

**Conclusion**: RARP is a safe method for surgical treatment of LAPC. In order to achieve optimal functional results regardless of the stage of the disease, surgical experience and good technique are necessary. Imaging methods do not provide reliable information about the stage of the disease.

Correspondence to: Semerdzhiev Ya, Departments of Urology and Pathology (NM), Long Island Jewish Medical Center, New Hyde Park, New York, USA.

Email: semerdzhiev@gmail.com

#### **Electronic Poster Presentations**

#### Validation of a laparoscopic partial nephrectomy simulation model

Abdelkrim Boulatrous<sup>a, '</sup>, Riad Boubekeur<sup>a</sup>, Nour Islem Kadem<sup>a</sup>, Riad Boutamine<sup>a</sup>, Redjdal Moahmed Lahlou<sup>a</sup>, Mourad Nouacer<sup>a</sup>, Nassim Laskri<sup>a</sup>, Samir Atik<sup>a</sup>, Sina Haiahem<sup>a</sup>, Khaireddine Chettibi<sup>a</sup>

<sup>a</sup> University Hospital Annaba, Algeria.

**Background:** Simulation is an important adjunct to traditional surgical training, allowing for repetitive practice of new skills without compromising patient safety. While several simulation models have been described and evaluated for surgical procedures, there is a lack of such models for laparoscopic partial nephrectomy. The objective of this study was to design a low-cost simulation model for laparoscopic partial nephrectomy and assess its validity as a training tool.

**Methods:** To achieve this, we utilized 3D imaging of a patient's kidney with a tumor and added two additional tumors. From this model, we created two molds, one of the kidney and the other of the tumors. Using 3D printing technology, we produced multiple models using molding silicone and pigment. The generated models were used in workshops on pelvic trainers, where 40 participating urologists with varying skill levels performed two exercises of tumor dissection and suturing. Following the simulation, a validation questionnaire was distributed.

**Results:** In the post simulation survey, the majority of urologists agreed that the model was realistic (4.3/5) and included the essential steps of a Partial Nephrectomy Dissection and Suturing (4.5/5). Most participants also agreed that they would feel better prepared for a partial nephrectomy if they practiced beforehand on the model (4.5/5). Moreover, the majority of urologists emphasized that this workshop was a valuable training experience and underscored its significance in the development of laparoscopy skills (4.8/5).

**Conclusion:** We successfully developed a model to simulate minimally invasive partial nephrectomy. The initial simulations using the model were well received by the

participants. The development and refinement of the model will continue to determine its validity and usefulness as an educational and practical tool for laparoscopic partial nephrectomy.

Correspondence to: Abdelkrim Boulatrous, University Hospital Annaba, Algeria.

Email: dr.boulatrous@gmail.com

Systematic review comparing efficacy and used techniques of percutaneous nephrolithotomy and retrograde intrarenal surgery for treatment of renal stones in the adult population

Hesham Abdelaziz<sup>a,\*</sup>, Mohamed Gad<sup>a</sup> Cairo University, Egypt.

**Background:** There is limited evidence on the efficacy and safety of treatment options of medium to large renal stones, with no standardized census on choosing the treatment modality pertaining to renal stones. The aim of this study is to provide a systematic review and meta-analysis of published articles in the literature comparing retrograde intrarenal surgery (RIRS) with percutaneous nephrolithotomy (PCNL) techniques for the treatment of kidney stones by evaluating the stone free rates, complications, operative and fluoroscopy times, hospital stay and overall complications rates.

Methods: A search of PubMed, Cochrane Library, ScienceDirect, Wiley Online Library, and Scopus databases to identify all studies comparing RIRS and PCNL from the inception to May 2023 was conducted. Article selection was performed through the search strategy based on Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) criteria. A subgroup analysis was performed comparing PCNL techniques including the minimally invasive percutaneous techniques including mini and micro PCNL with RIRS.

Results: A total of 24 retrospective studies and randomized clinical trials involving around 3500 patients with stone size 1.0-3.0 cm were included for this review. Meta analyses for stone free rate (SFR) found out that stone free rates within 1–3 months are statistically higher in PCNL, ranging around 71.2-98.8% and RIRS ranging around 82–93%. PCNL produces best stone free rates in literature (odds ratio [OR] = 3.45, 95% confidence interval [CI] = 1.30–9.12), followed by Mini-PCNL (OR = 2.90, 95%CI = 1.13–7.46) and Ultra mini PCNL (OR = 2.01; 95%CI = 1.12-3.61). There is no statistical significance in comparing the risk of complication in UMPCNL and mini PCNL to RIRS (P = 0.48; OR = 1.20; 95%CI = 0.73–1.98) and (OR = 1.76; P = 0.11) respectively; with complications rate of around 25% in PCNL compared to 22% in RIRS. The operative time of PCNL procedure range around 53.7  $\pm$  14.5 to 85.5  $\pm$  41.1 minutes meanwhile RIRS procedure can last up to  $123.0 \pm 57.4$ . It was noted that stone-free rate of PCNL was superior to RIRS for stones > 2 cm (OR = 6.71, 95%CI = 1.45-31.12).

**Conclusion:** The literature unequivocally supports that PCNL is associated with the best stone free rate and shorter operative time regardless of the size of the stones.

All modalities of treatment determined statistical insignificances in complication rate.

Correspondence to: Hesham Abdelaziz, Cairo University, Egypt. Email: hesham.abdelaziz@aol.com

### Urinary surgery in the golden era of old Arabian medicine tarek

Track El-Morsy Aboaly<sup>a,\*</sup>, Moustafa El Rifaie<sup>a</sup> Health insurance Ministry of health, Egypt.

The early Arab physicians inherited a treasury of medical knowledge from the Greeks, Persians, and Indians. They were greatly affected by the spirit of Hippcrates and the teachings of Galen. During the eighth through the eleventh century A.D., there was a medical Renaissance which was known as the Golden Era of old Arabian Medicine. This period introduced to science eminent Doctors, such as Al-Tabary, Ibn-Kurrah, Al Razy, Al-Zahrawy, Al-Magousy, and the most eminent of all Ibn Sina. This article will discuss the contributions of Arab physicians in the field of urology in general and urinary Surgery in particular. Lastly, one can conclude by a word of truth, written by the European physician De Poure who declared that, "Medicine was absent until Hippcrates created it, dead until Galen revived it, dispersed until Razes collected it and deficient until Avicenna completed it".

Correspondence to: Tarek El-Morsy Aboaly, Health insurance Ministry of health, Egypt.

Email: tarekelmorsy56@yahoo.com

### Predictive modality in early detection of cancer prostate

Mohamed Al Bengawy<sup>a, '</sup>, Gamal Abdel Malek<sup>a</sup>, Saad Gebaly<sup>a</sup>, Hazem Abdel Sabour Deif<sup>a</sup>

<sup>a</sup> Al-Azhar University, Egypt.

The objective of the study was to identify the optimal predictor to screening of PC by PSAD and MRI diffusion and to minimize the un needed TRU/S biopsies. There is no significant difference between both studied groups as regard age and tPSA. The mean of prostatic volume, free PSA, f/t PSA of patients were significantly lower in PC patients (P = 0.031, 0.000, and 0.002, respectively), meanwhile the mean of PSAD was significantly higher in PC patients (P = 0.025). The ROC curve shows that, PSAD was significantly better predictor of PC with higher AUC than PSA volume, it was 20.8% by PSA volume versus 80.2% by PSAD (P = 0.025). There were significant strong negative correlations between PSA Density and prostatic volume (r = -0.786, P = 0.002). And another significant strong positive correlation between Gleson score and prostatic volume (r = -0.665, P = 0.018). The area under the ROC curve was 0.813 (95%CI = 0.611-1), 0.854(95%CI = 0.669-1) and 0.604 (95%CI = 0.346-0.863)for MRI diffusion, TURS and TURP, respectively. The sensitivity, specificity, PPV, and NPV for MRI diffusion were 75.0%, 87.5%, 90.0%, and 70.0% respectively (P =0.021) with accuracy 80%, for TURS were 83.3%, 87.5%,

90.91%, and 77.78% respectively (P = 0.009) with accuracy 85%, and for TURP were 58.3%, 62.5%, 70.0%, and 50.0% respectively (P = 0.440) with accuracy 60%. The sensitivity and specificity for combined MRI diffusion and PSAD were 68.8% and 98.4 respectively, meanwhile for TURS were 83.3% and 87.5% respectively. For screening of PC, combination of PSAD and MRI diffusion increase the specificity and enhance the prediction of PC, avoid unnecessary prostate biopsies and obtain an acceptable positive rate of PC detection from the core biopsy specimens.

Correspondence to: Mohamed Al Bengawy, Al-Azhar University, Egypt. Email: drmtahtawy2017@yahoo.com

## Comparing efficacy and safety of virabegron, mirabegron and tolterodine in overactive bladder patients; systematic review and network meta-analysis

Maged Elsayed Hassanein<sup>a</sup>, Heba Hamouda<sup>b</sup>,Rana Ibrahim Abdallah shehatah<sup>c</sup>, Omar Kaoud<sup>d</sup>, Mahmoud Shaban<sup>c</sup>, Ahmed Salah El-Din Mohammed<sup>c</sup>, Aya Mohammed Sharkawy Mohammed<sup>f</sup>, Ahmed Abdelaziz<sup>g</sup>, Omar Abdelsalam Nasr<sup>b</sup>

- <sup>a</sup> Faculty of Medicine, Zagazig University, Egypt, Member of MRGE.
- <sup>b</sup> Faculty of Medicine, Menoufia University, Menoufia, Member of MRGE.
- <sup>c</sup> Faculty of Medicine ain Shams University, Member of MRGE.
- <sup>d</sup> Tanta University faculty of medicine, Member of MRGE.
- <sup>e</sup> Faculty of Medicine October 6 University, Member of MRGE.
- <sup>f</sup> Faculty of Medicine South Valley University, Qena, Member of MRGE.
- g the Faculty of Medicine, Al-Azhar University, Cairo, Egypt. Member of MRGE.
- <sup>h</sup> Urology Department, Ipswich Hospital, UK. Member of MRGE.

**Aims of the Study:** to compare the efficacy, safety, and quality outcomes of different doses of vibegron, mirabegron, and tolterodine in overactive bladder patients.

**Methods:** We searched SCOPUS, PubMed, the Web of Science, Cochrane, and Embase for randomized controlled trials evaluating any doses of vibegron, mirabegron, tolterodine for overactive bladder patients with maximum twice daily. The efficacy outcomes of this study are number of micturition episodes per 24 h, number of incontinences per 24 h, number of urinary urgency, incontinence episodes per 24 h, number of urgency episodes per 24 h, volume voided each time per 24 h, and number of nocturia episodes per 24 h. While safety outcomes are the frequency of dry mouth, headache, nausea, constipation, and treatment emergent adverse events. For Quality assessment, there are patient perception of bladder condition, treatment satisfaction visual analogue scale, and overactive bladder questionnaire. We used R studio to do both types of analysis conducted a pairwise and frequentist network meta-analysis of published randomized controlled trials (RCTs) by R software using netmeta package to evaluate the different doses of vibegron, mirabegron, and tolterodine.

**Results:** 45 studies were pooled in the final analysis included 30072 patients with OAB. In terms of the number of micturition episodes per 24 h, number of urgency episodes per 24 h and number of nocturia episodes per 24 h, the forest plot shows that mirabegron 25 mg is the most superior dose in those outcomes followed by mirabegron 50 mg in micturition episodes while mirabegron

25 mg followed by vibegron 100 mg in both urgency episodes and nocturia episodes. In terms of the number of incontinences per 24 h and urinary urgency incontinence episodes per 24 h, the forest plot shows that mirabegron 100 mg is the most superior dose. In the terms of mean of volume voided each time per 24 h, the vibegron 50 mg is the most superior dose. In terms of safety outcomes, treatment emergent adverse events the forest plot shows that mirabegron 100 mg twice daily is the least arm to produce TEAES. In terms of quality assessment, treatment satisfaction visual analogue scale the forest plot shows that mirabegron 100 mg is the most superior dose.

**Conclusion:** Depending on our analysis, the results demonstrated that mirabegron 25 mg has better efficacy outcomes for three out of six major outcomes including the number of micturition episodes per 24 h, number of urgency episodes per 24 h, and number of nocturia episodes per 24 h.

Correspondence to: Maged Elsayed Hassanein, Zagazig University, Foynt

Email: magedelsayed8088@gmail.com

### Erectile dysfunction and COVID-19: case control study within the Annaba University Hospital

Riad Boubekeur<sup>a,\*</sup>, Kheirredine Chettibi<sup>a</sup>, Mourad Nouacer<sup>a</sup>, Sina Haiaham<sup>a</sup>, Samir Atik<sup>a</sup>, Abdelkrim Boulatrous<sup>a</sup>, Nassim Laskri<sup>a</sup>, Amina Bougouizi<sup>a</sup>, Mohcen Largueche<sup>a</sup>

<sup>a</sup> Urology Department, Hospital University Annaba, Algeria.

Since 2019, the world has experienced an unprecedented pandemic, linked to the coronavirus (COVID-19). Although the primary infection occurs in the respiratory system, it is recognized that COVID-19 can impact other areas of the body, among them the vascular system. Increasing attention is turning to the sequelae that this virus can have, especially on erectile function. The objective of the study is to identify among COVID-19 positive patients, those who have developed ED, assess their erectile function at a distance from the infection. To study the association between COVID-19 infection and erectile dysfunction, a case control study, which will assess ED in 30 adult men (≥ 18 years old) with a history of COVID-19 infection comparing them to an equivalent number of adult males with no history of COVID-19 infection during the same period. The odds ratio was calculated for each group taking into account the confounding variables (prostatic and cardiovascular pathologies and diabetes) in order to carry out a multivariate study. The data for the systematic literature review were collected via a search carried out on Pubmed. Among the 60 men in the study, half had a history of COVID-19 infection. The average age was 53 years old. No patient was questioned about his erectile function, neither at the time of the diagnosis of COVID-19, nor during the follow up consultations. In the COVID-19 (-) control group, 80% of patients had normal erectile function. 63% of patients with COVID-19 developed ED at the time of infection, indeed, multivariate analysis found a significant relationship between COVID 19 and ED (P < 0.0001); and 71% of them report that they

have recovered normal erectile function away from the infection. Few studies have been conducted on this subject around the world, and there are only 2 North African studies (conducted in Egypt). Nevertheless, our results agree with those found in the literature. Most of the data support a link between COVID-19 and erectile dysfunction. Nevertheless, long term prospective studies are needed to clarify the extent of the impact of COVID-19 on erectile function.

Correspondence to: Riad Boubekeur, Urology Department, Hospital University Annaba, Algeria.

Email: riadboubekeur23@outlook.fr

### Predictors of successful treatment in emphysematous pyelonephritis: a multicenter study

Ali Ibrahim<sup>a.\*</sup>, Hossam Nabeeh<sup>a</sup>, Ali Abdel Raheem<sup>a</sup>, Ibrahim Alowidah<sup>a</sup>, Nasser Aljameel<sup>a</sup>, Abdelkarim Alrubat<sup>a</sup>, Mefarrih Yahya Haresy<sup>a</sup>, Salem Bahdilh<sup>a</sup>, Abdulhkam Aljarbou<sup>a</sup>, Diaa Eldin Taha<sup>a</sup>

<sup>a</sup> Kafr Elsheikh University, Egypt.

**Background:** To see how effective JJ stenting was as a drainage strategy in emphysematous pyelonephritis (EPN) compared to percutaneous nephrostomy (PCN) and to document the predictors of successful treatment.

**Methods:** It is a retrospective multicenter study. Patients with EPN were identified between May 2014 and November 2021. Renal drainage by either PCN or JJ stent was required if symptoms persist for  $\geq 3$  days or in obstructed renal units. Conversion to another drainage method, necessity for critical care unit admission, salvage nephrectomy, and mortality were considered failures of the drainage approach.

**Results:** 57 patients were analyzed, of which 20 patients were managed by JJ stent. Nine patients were admitted to the ICU. The mean SD hospital stay (was  $10 \pm 3$  and  $4 \pm 1$ in the PCN and JJ stent, respectively (P = 0.09). Nephrectomy was done in 3 and one cases in the PCN and JJ stent, respectively. Treatment success was identified in 32/37 (85.7%) patients and 18/20 (86.7%) patients who were managed by PCN and JJ stent, respectively. On univariate analysis, patient age (P = 0.01), WBCs on presentation (P = 0.05), platelet to leucocyte ratio on presentation (P =0.01), visible gases on KUB (P = 0.04), higher EPN grade on CT (P = 0.05), and pneumomediastinum (P = 0.02)were the predictors of treatment of failure. On bivariate analysis, patient age (P = 0.01) (OR = 1.06, CI = 0.9–1.15), WBCs on presentation (P = 0.00) (OR = 1.26, CI = 1.02– 1.15), platelet to leucocyte ratio on presentation (P = 0.01) (OR = 1.2, CI = 1.02-1.45), higher EPN grade on CT (P =0.02) (OR = 1.26, CI = 0.29–5.31) were the independent predictors of successful treatment.

Conclusion: Ureteral JJ stenting is a successful approach for EPN drainage that is comparable to PCN use in terms of overall success. Younger Patient, low WBCs on presentation, low Platelet to leucocyte ratio on presentation, and higher EPN grade on CT were the independent predictors of successful treatment.

Correspondence to: Ali Ibrahim, Kafr Elsheikh University, Egypt.

Email: dralimed0@gmail.com

## Efficiency of the double HIT injection in the endoscopic treatment of vesico ureteral reflux? A single center, 6 year experience

N. Brinis<sup>a,\*</sup>, H. Oauarhlent<sup>a,b</sup>, H. Benakcha<sup>a</sup>

- <sup>a</sup> Specialized Mother and Child Meriem bouatoura Hospital Batna.
- b Department of Urology surgery HUC Batna.

The purpose of our study was to confirm efficiency of the double hidrodistention-implantation technique (double HIT) in the endoscopic treatment of VUR in children. We report the results of our experience of 110 children treated by endoscopic injection (150 ureters) at the Pediatric Surgery Department Specialized mother and child Meriem Bouatoura Hospital Batna Algeria between March 2017 and March 2023. All children have VUR of different grades II, III, IV, V and different types, primitive or secondary. The operated children were aged from 5 months to 14 years. The injection technique we used was a double HIT with an adapted pediatric cystoscope, using the product recommended by the World Federation of Pediatric Surgery "Le Deflux". The result of this treatment was judged on the disappearance of the infectious episodes. The disappearance or regression of dilatations of the excretory cavities on ultrasound as well as the presence and appearance of the injected implant. The disappearance of RVU, improvement in its grade or its persistence on retrograde ureterocystography made after 3 months. 8 children were reinjected, 27% 92, 93% success at the 1st injection and 100% after the 2nd injection. Endoscopic treatment of vesicoureteral reflux using the double HIT technique is the most safe, effective, and elegant alternative to open surgery and chronic antibiotic.

Correspondence to: Brinis Nedjema, Faculty of Medicine, Mostapha Benboulaid, University Batna.

Email: nedjema.brinis@univbatna2.dz

## Single-port transvesical robot-assisted radical prostatectomy

Roxana Ramos<sup>a</sup>, Ethan Ferguson<sup>a</sup>, Jaya S. Chavali<sup>a</sup>, Nicolas Soputro<sup>a</sup>, Adriana Pedraza<sup>a</sup>, Carter Mikesell<sup>a</sup>, Jihad Kaouk<sup>a,\*</sup>

<sup>a</sup> Glickman Urological & Kidney Institute, Cleveland Clinic, Cleveland, OH, USA.

**Background:** We aim to present the surgical technique and updated results for the largest consecutive cohort of patients that underwent single-port (SP) transvesical (TV) robot-assisted radical prostatectomy (RARP).

**Methods:** We analyzed a single-center prospectively maintained database for patients that underwent SP TV RARP from November 2020 to July 2023. Descriptive statistics were used to report the results of the initial consecutive 200 cases. Surgical steps included a 3 cm suprapubic incision to access the bladder, the use of the floating technique with a purpose-built access port, excision of the prostate, and a watertight vesicourethral anastomosis with preservation of urethral length. Nerve-sparing and limited

lymphadenectomy were performed when indicated. Patients were discharged within 24 hours when feasible and the urinary catheter was removed three to five days after the surgery.

**Results:** A total of 200 cases were performed successfully, without additional ports or conversions. Median age and body mass index were 63 years and  $28.4 \text{ kg/m}^2$ . Median console time and estimated blood loss were 126.2 minutes and 70.0 mL. Nerve-sparing and pelvic lymph node dissection were performed in 80.5% and 27.0% of cases, with a median lymph node yield of two and no positive nodes. Positive margin rate was 24.0%, and 77.0% (37/48) of these were limited (< 3 mm). The most frequent location was posterior (26/48 = 54.1%), followed by apex (17/48 = 35.4%). Median length of stay was 5.0 hours and 94.5% of patients did not require opioids at discharge. Forty percent were continent within one week.

**Conclusion:** SP TV RARP is a minimally-invasive alternative for the treatment of clinically-localized prostate cancer. In our experience, the postoperative course after this procedure promotes fast recovery with minimal pain which facilitates same-day discharge.

Correspondence to: Jihad Kaouk, Glickman Urological & Kidney Institute, Cleveland Clinic, Cleveland, OH, USA.

Email: kaoukj@ccf.org

#### Local anesthetic transperineal template prostate biopsy in concordance of general anesthetic histology

Ahmed Aboelattaa,\*

<sup>a</sup> Ashford and St Peters' Hospitals, London, UK.

**Background:** This study aims to assess the efficacy of diagnostic LATP for prostate cancer in comparison to GATP.

Methods: Diagnosis of prostatic cancer by PSA, prostatic MRI, and histology. Prostatic histology is still the corner stone as diagnostic and prognostic tool. Several methods for obtaining prostatic tissue including TRUS, GATP, and LATP. TRUS used to be common way to gain the biopsy. Due to high post biopsy comorbidities, with limitation of the numbers of the cores, and targeting the anterior prostatic peripheral zone, GATP was commenced but with risk of general anesthesia complications, long waiting lists, infection risk. LATP has the advantages of avoiding exposure to GA (general anesthesia) and can be done as office procedure. Additionally, the ability to target the anterior peripheral zone of the prostate either free hand, needle guiding grid or brachytherapy grid. Lower risk of infection and bacterial resistance for antibiotics. Under guidance of transrectal US and matching with MRI findings, targeting the lesions is doable. Our study included 322 patients had LATP, and 142 patients had GATP and make a comparison of histology results (grade, maximum core length), PSA, MRI findings, post biopsy complications.

**Results:** 42 of the 142 patients had previous histology by LATP. 29 of these 42 patients (69%) have the same histology by both GATP and LATP. 9 patients have upgraded histology by saturation GATP (31%). One patient of 322 patients after LATP had AUR. Two patients post developed AUR, and sepsis (needed admission).

Conclusion: LATP should continue to be used in the initial biopsy setting. In those pursuing active surveillance, repeat biopsy should be undertaken. If suspected under sampling (MRI discordance, PSA kinetics, and poor-quality samples), repeat biopsy should be undertaken. Need to continue to collect data and audit results.

Correspondence to: Ahmed Aboelatta, Ashford and St Peters' Hospitals, London, UK.

Email: asp-tr.comms.mailbox@nhs.net

#### Pregnancy after renal transplantation

Soumia Missoum<sup>a, \*</sup>, Chinar Athmane<sup>a</sup>, Houssem E. ddine Ouarhlent<sup>a</sup>, Abdessemed Yazid<sup>a</sup>, Bourenane Haithem<sup>a</sup>, Brinis Nedjma<sup>a</sup> <sup>a</sup> University of Batna, Department of Medicine, Nephrology Department Benflis Touhami University Hospital, Batna.

**Background:** Due to the recent increase in the successful pregnancies after renal transplant, the number of renal transplant recipients having vaginal or cesarean delivery possibly associated with high maternal, fetal and/or neonatal risk requiring team approach increased. The aim of this study is to give the results of our experience about pregnancies among the renal transplantation patients and to assess the impact of the pregnancy on renal graft function.

**Methods:** 56 pregnancies from renal transplant recipients were analyzed and long-term outcome of the renal graft was studied. We analyzed the outcomes from clinical and biological data before, during and after pregnancy.

**Results:** Mean patient age was  $35.3 \pm 3$  years and meantime between transplantation and the onset of pregnancy was  $56.4 \pm 31.5$  months. There was no significant difference between the biological data before and after pregnancy. We did not observe any acute rejection. The mean maternal complications were preeclampsia in 30%, low birth weight in 29%, prematurity in 44% and cesarean sections in 57%. There is no impact of the pregnancy on the renal graft during the follow up (3 years). The follow up revealed 2 cases of chronic rejection.

**Conclusion:** Despite the presence of preterm delivery and comorbidities, follow-up and management of renal transplant recipients revealed good renal graft function outcomes.

Correspondence to: Soumia Missoum, University of Batna, Department of Medicine, Nephrology Department Benflis Touhami University Hospital, Batna.

Email: soumia\_missoum@outlook.fr

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