

**NDP032:**  
**IS THERE NECESSARY TO PERFORM URETERECTOMY IN RENAL CELL CARCINOMA TREATMENT**

Hueih-Shing Hsu, Heng-Chang Chuang, Shyh-Chyi Chang, Hsu-Hsiang Wang, I-Hung Shao. *Division of Urology, Department of Surgery, Lotung Pohai Hospital Yilan, Taiwan*

**Purpose:** Radical nephrectomy is the standard surgical treatment of localized renal cell carcinoma.

Is there necessary to perform ureterectomy at the same time? We challenge this question, because we have two cases of renal cell carcinoma received radical nephrectomy but recurrent tumor was found in the ureter several years later.

**Materials and Methods:** This is a 79 years old man who received left radical nephrectomy for renal cell carcinoma stage (T2N0M0) 4 years ago. And he underwent hemodialysis for end stage renal disease for 5 years. Gross hematuria was noted recently and CT scan showed left ureter tumor in the remaining stump. Ureterectomy with bladder cuff was done and pathology showed transitional cell carcinoma stage T3N0M0.

**Results:** This is a 90 years old man who received left radical nephrectomy for renal cell carcinoma (stage T3N0M0) 14 years ago. He suffered from gross hematuria and CT showed left ureter tumor in the stump. Ureterectomy with bladder cuff was done and pathology showed renal cell carcinoma stage T4N1M0.

**Conclusion:** Renal cell carcinoma is not only existed in renal parenchyma but also in collecting system. Transitional cell carcinoma may occurred in the remaining stump of ureter in uremia patient. So it is better to perform ureterectomy in uremia patient or the larger renal tumor closed to renal pelvis.

**NDP033:**  
**ACUTE URINARY RETENTION IN A MAN WITH PROSTATE CANCER STILL ELIGIBLE FOR TRANSURETHRAL RESECTION OF PROSTATE**

Chih-Te Lin, Chen-Pang Hou, Yu-Hsiang Lin, Ke-Hung Tsui, Phei-Lang Chang, Chien-Lun Chen. *Division of Urology, Department of Surgery, Chang Gung Memorial Hospital at Linkou, Chang Gung University, College of Medicine, Taoyuan, Taiwan*

**Purpose:** To interrogate the outcome of transurethral resection of prostate (TURP) in men with prostate cancer (PCa).

**Materials and Methods:** A total of 160 patients with prostate cancer undergoing TURP for acute urinary retention (AUR) between 2001 and 2010 were retrospectively reviewed. Thirty-eight patients undergoing palliative TURP (pTURP group) and the other 122 patients with newly diagnosed prostate cancer received TURP (iTURP group) were compared. We also included 9 patients with prostate cancer undergoing palliative cystostomy without TURP (cystostomy group). The data, including preoperative characteristics, perioperative morbidities and mortality were analyzed.

**Results:** There were no significant differences between the 2 groups in age, initial PSA (iPSA), operative time, incontinence rate, hospital stay or Foley catheter duration. However, the prostate volume was higher in iTURP group ( $49.31 \pm 25.57$  gm) than in pTURP group ( $39.29 \pm 18.36$  gm) ( $p = 0.006$ ). The mean resected weight was higher in iTURP group (14 gm) than in pTURP group (10 gm). The pTURP group was more likely to recatheterization and the Foley home rate (FHR) was higher. The re-operation rate was not significant over two groups. There was no complication such as transurethral resection (TUR) syndrome or perioperative death in either group. There was no significant difference of mortality over two groups.

**Conclusion:** TURP can be performed safely for relief of AUR in patients with prostate cancer, no matter if the cancer was diagnosed before or after surgery. The recatheterization rate and FHR were higher in pTURP group, which may be due to the palliative intent.

**NDP034:**  
**TWO RARE CASES OF PRIMARY MALIGNANT SMALL CELL CARCINOMA COMBINED WITH UROTHELIAL CELL CARCINOMA IN THE URETER AND METAANALYSIS**

Jih-Cheng Wang<sup>1,2</sup>, Li-Jing Ye<sup>3</sup>, Zi-Ru Chen<sup>3</sup>, Yu-Hsuan Kuo<sup>4</sup>. <sup>1</sup> *Divisions of Urology, Department of Surgery, Chi-Mei Medical Center, Tainan, Taiwan;*

<sup>2</sup> *Institution of Biomedical Engineering, National Cheng Kung University, Tainan, Taiwan;* <sup>3</sup> *Department of Pathology, Chi-Mei Medical Center, Tainan, Taiwan;* <sup>4</sup> *Division of hemato-oncology, Department of Medicine, Chi Mei Medical Center, Tainan, Taiwan*

**Background:** Extrapulmonary small cell carcinomas have been reported in a variety of organs, and their incidence in the genitourinary tract is second only to that in the gastrointestinal tract. To date, however, only a few cases of small cell carcinoma of the ureter have been reported. Because the extreme rarity of this combined type of carcinoma, its clinical behavior, and effective treatment modalities have not yet been studied well.

**Cases Presentation:** A 73-year-old man has a past history of prostate adenocarcinoma, cT3aN0M0, s/p hormone therapy and radiotherapy and regular followup at OPD. He presented with a two-month history of painless gross hematuria. He had a smoking history of one pack (Cigarettes, 20/pack) per day for over 30 years, but without having any respiratory symptoms. After intravenous pyelography survey, left UPJ tumor was suspected and diagnostic ureteronephroscopic biopsy revealed urothelial carcinoma. Laparoscopic Nephroureterectomy done and pathologic examination showed an SCC combined with a urothelial carcinoma in the ureter.

Another patient is a 67 year-old female with a diabetes history, present with intermittent painless gross hematuria. She also received diagnostic ureteronephroscopic biopsy then laparoscopic nephroureterectomy with bladder cuff done. The small cell carcinoma was diffusely positive for neuron-specific enolase, and exhibited focal positivity for CD 56, synaptophysin, chromogranin and cytokeratin 20. They were treated with adjuvant chemotherapy, consisting of cisplatin and etoposide, and has been well, without evidence of tumor recurrence or metastasis in the 6 months after surgery.

**Conclusion:** Small cell carcinoma of the ureter is rare. Combined urothelial carcinoma with SCC is rarer. Although its clinical behavior and diagnostic modalities have not been determined and it has yet to be diagnosed immunohistopathologically, multimodality treatment including surgery, chemotherapy and radiotherapy may improve patient survival.

**LUTS**

**NDP035:**

**FOR SMALLER WEIGHT TRANSURETHRAL RESECTION OF PROSTATE, COMBINED TRANSURETHRAL INCISION OF BLADDER NECK IS AN INDEPENDENT FACTOR FOR LESS URINARY RETENTION RATE. – A NATION-WIDE DATABASE STUDY**

Tzu-Chun Wei<sup>1,2</sup>, Tzu-Ping Lin<sup>1,2</sup>, Alex T.L. Lin<sup>1,2</sup>, Hsiao-Jen Chung<sup>1,2</sup>, Eric Y.H. Huang<sup>1,2</sup>, Kuang-Kuo Chen<sup>1,2</sup>. <sup>1</sup> *Department of Urology, Taipei Veterans General Hospital, Taiwan;* <sup>2</sup> *Department of Urology, School of Medicine, and Shu-Tien Urological Institute, National Yang Ming University, Taipei, Taiwan*

**Purpose:** If the resection weight of transurethral resection of prostate (TURP) is smaller, acute urinary retention (AUR) after the operation may be a complication of great concern, especially for those without Foley indwelled previously. However, whether combined transurethral incision of bladder neck (TUIBN) may reduce AUR rates after the operation is still a question. Therefore, this article is aimed to analyze AUR rates after smaller resection weight of TURP in Taiwan according to the claims of the National Health Insurance (NHI) program.

**Materials and Methods:** From the NHI Research Database of Taiwan, we applied for the all the claims of patients who ever visited urology clinic during 2006 to 2010. We received all the records of both admission and ambulatory clinics. In Taiwan, the NHI divides TURPs into four categories according to the resection weight (<5g,  $\geq 5$ –15g,  $\geq 15$ –50g, and  $\geq 50$ g, respectively), and the first group (<5g) was defined as “smaller weight TURP”. AUR was defined as any kind of indwelling catheterization within 2 weeks after TURP with or without TUIBN. Patients younger than 40 years old were excluded. Patients who received TUIBN or optic or otis urethrotomy within 1 year before TURP and 2 months after were excluded, as well as those who had TURPs within 2 months between each surgery or long admission period (14 days) after TURP. Patients who had diagnosis of

prostate or bladder cancer within 3 months peri-operatively were excluded. ICD-9 codes for hypertension (HTN), diabetes mellitus (DM), cerebral vascular disease (CVA), spinal stenosis (SS), and herniated intervertebral disc (HIVD) were used for disease confirmation only when the diagnoses existed at least one year before TURP. Descriptive and comparative analyses were performed.

**Results:** There were 2597 TURPs analyzed, including 2497 TURPs only (group A) and 100 TURPs with combined with TUIBN (group B). The hospitalization days mainly ranged from 3 to 5 days. The mean age was 72.45, with 72.69 and 71.86 in group A and B respectively. Among all patients included, 245 of them were associated with AUR (9.43%), with 9.69% and 3.00% in group A and B ( $P = 0.022$ ). Patient who had previous AUR episodes within 2 months before TURP was of 23.64%, but pre-OP AUR was not significantly associated with higher post-OP AUR rate (11.24%) than no AUR before TURP (8.88%) ( $P = 0.083$ ). About co-morbidities, HTN, DM, CVA, SS, and HIVD were not significant risk factors for AUR after TURP ( $P = 0.934, 0.426, 0.111, 0.976, \text{ and } 0.362$  respectively). In multivariate analysis, combined TUIBN and younger age are the only two significant factors associated with less AUR rates after smaller weight TURPs. ( $P = 0.041$  and  $0.028$  respectively)

**Conclusion:** In Taiwan, most patients treated with smaller weight TURP without combined TUIBN. However, AUR rate is significantly lower in patients receiving combined TURP with TUIBN, regardless of pre-OP Foley indwelling or other co-morbidities. Although further randomized clinical trials are still necessary, it implies that for patients with bladder outlet obstruction treated with smaller resection weight of TURP, combined TUIBN may be beneficial, especially regarding the post-OP AUR episodes.

#### NDP036:

#### THE IMPACT OF PSEUDEPHEDRINE ON LOWER URINARY TRACT SYMPTOMS IN MALE PATIENTS WITHOUT CONCOMITANT VOIDING DYSFUNCTION

I-Hung Shao<sup>2</sup>, Hueih-Shing Hsu<sup>2</sup>, Shyh-Chyi Chang<sup>2</sup>, Hsu-Hsiang Wang<sup>2</sup>, Heng-Chang Chuang<sup>2</sup>, Yuan-Yun Tam<sup>1</sup>. <sup>1</sup>Division of Urology, Poh-Ai Hospital, Lotung, Yilan, Taiwan; <sup>2</sup>Division of Otolaryngology, Poh-Ai Hospital, Luodong, Yilan, Taiwan

**Purpose:** Pseudoephedrine is a widely used sympathomimetic amine on patients with rhinorrhea and allergic rhinitis. The vasoconstriction effect is believed to be principally an on  $\alpha$ -adrenergic receptor response. Urinary retention was considered contraindication while use on patients with concomitant prostatic hypertrophy needs precautions. Although not one of the most seen overall side effects, patients suffered from urinary retention or dysuria after taking pseudoephedrine may come to urologists for help. The study aimed to elucidate the impact of pseudoephedrine on lower urinary tract symptoms (LUTS) in patients without self-reported voiding dysfunction.

**Materials and Methods:** All male patients came to our Otolaryngology OPD for acute or chronic rhinitis was asked by doctors to make sure they are free from voiding dysfunction by self-reported. Then patients with voiding problems or under current medication treatment for LUTS were excluded. Other patients were given medication according to the individual clinical symptoms. Once pseudoephedrine was prescribed, International Prostate Symptom Score (IPSS) questionnaires were filled in by the patients. After treatment with pseudoephedrine for 1 week, a post-medication IPSS questionnaire was filled for follow-up. Total 68 patients complete the survey. Age, IPSS total score, IPSS voiding score, IPSS voiding score, quality of life score were analyzed for correlation.

**Results:** The average age of total 68 patients was 38.7 year-old (15-71 year-old). The average IPSS total score before and after medication was 4.81 and 6.54 respectively. The average IPSS voiding / storage score before medication were 2.53/2.35 and changed to 3.68/2.87 after medication. Quality of life score based on voiding condition were 1.88 and 2.03 before and after medication. Independent T-test was used to evaluate the predictors for worsen (defined as increased IPSS-T) and stable (defined as equal or decreased IPSS-T) voiding condition. Age, pre-medication IPSS-T and IPSS-V were significant predictors for worsen voiding function after taking pseudoephedrine. Quality of life score based on voiding condition before and after medication showed no significantly difference.

**Conclusion:** Patients who were self-reported free from voiding dysfunction may still suffer from increased LUTS after pseudoephedrine. Age and pre-medication IPSS-V score could be predictors for the presence of increased LUTS.

#### NDP037:

#### SURGICAL TREATMENT OF KETAMINE-ASSOCIATED ULCERATIVE CYSTITIS: 8-YEAR EXPERIENCE AT CATHAY GENERAL HOSPITAL AND REVIEW OF SERIES

Chu-Hsuan Hung, Chih-Ming Lin. Division of Urology, Department of Surgery, Cathay General Hospital, Taiwan

**Purpose:** To review clinical outcomes of bladder augmentation with ileocystoplasty for ketamine-associated ulcerative cystitis secondary to long-term ketamine abuse.

**Materials and Methods:** We performed bladder augmentation with ileocystoplasty for 8 patients with refractory symptoms of ketamine cystitis (severe bladder pain, micturition pain, urgency, frequency, and/or urinary tract damage such as hydronephrosis, and contracted bladder). Every patient had been treated conservatively with medication at OPD or referred from other hospital. Intravenous pyelography and/or cystoscopy were obtained before they had received surgical intervention. Their history of ketamine consumption, symptoms, history of treatment, surgical information and post-operative condition was obtained from medical records and then summarized.

**Results:** Between 2007 and 2015, eight patients (seven males and one female), aged 26-48 years (mean 32.7 years) underwent this procedure as indicated. The duration of ketamine abuse ranged from 2-15 years (mean 6.8 years). Contracted bladder was noted in all patients, hydronephrosis in 2 and hydroureter in 1 under intravenous pyelography examination. Post-operative hospitalization ranged from 12-47 days (mean 22.4 days). One patient had ileus post colono-enteric bypass post-operative within 90 days. One had impaired renal function before surgery and received intermittent hemodialysis 5 years after surgery. Most of patients followed up at OPD within 1 year and loss follow-up after. All patients reported marked improvement in micturition pain and urinary frequency, which greatly enhance their quality of life.

**Conclusion:** This study demonstrated that bladder augmentation is effective in relieving refractory symptoms of ketamine-associated ulcerative cystitis. Cessation of ketamine is the most important way to prevent recurrence of above symptoms. This is not only a medical issue, but timely intervention of social workers and psychological support are also essential.

#### NDP038:

#### LONG-TERM COMBINED $\alpha$ -BLOCKERS AND 5- $\alpha$ -REDUCTASE INHIBITOR IN BPH-THERAPEUTIC EFFECTS, ADHERENCE, AND PREDICTORS FOR WITHDRAWAL OF MEDICATION

Hueih Ling Ong<sup>1</sup>, Chun Hou Liao<sup>2</sup>, Hann-Chorng Kuo<sup>1</sup>. <sup>1</sup>Department of Urology, Buddhist Tzu Chi General Hospital, Hualien, Taiwan; <sup>2</sup>Department of Urology, Cardinal Tien Hospital and Fu-Jen Catholic University, New Taipei, Taiwan

**Purpose:** To investigate the long-term therapeutic effects, patient adherence of combination therapy of 5- $\alpha$ -reductase inhibitor (5ARI) and alpha-blocker, and the predictors for withdrawal of medication in patients with clinical benign prostatic hyperplasia (BPH).

**Materials and Methods:** BPH patients with lower urinary tract symptoms (LUTS) under combination therapy were retrospectively analyzed from 1 to 12 years span. The therapeutics effects were assessed by International Prostatic Symptoms Score (IPSS) and quality of life index (QoL-I), total prostatic volume (TPV), maximum flow rate (Qmax), voided volume (VoL), prostatic specific antigen (PSA) at baseline and annually. The reason and predictors of discontinued combination therapy were also investigated.

**Results:** A total of 625 patients aged 38 to 97 (mean 73) years where enrolled retrospectively with at least 1 year and the longest period of 12 years follow-up. The mean year follow up was 3 years. All measured parameters showed significant improvement after combination therapy. The