

**Materials and Methods:** Between Jun 2013 and Dec 2014, 60 patients who were diagnosed of premature ejaculation (IELT < 1 min) with low coital frequency ( $\leq 2$  per week), stable sexual partners, normal erectile function and without associate underlying diseases were included and were randomized divided into two groups (study and control group, 30 patients each, respectively). The patients in study group were informed to increase their weekly sexual frequency to  $\geq 3$ . The patients in control group were taught to carry out the behavioral therapy included stop and start technique or squeeze technique. Ejaculatory latency increased more than 50% of the baseline and 30 seconds more on patients who ejaculated at the time of vaginal penetration after 3 months practice were considered to be effective.

**Results:** The mean ages of the study and control groups were  $37.2 \pm 11.9$  and  $36.3 \pm 12.2$  years, respectively. The average weekly coital frequency is similar to both groups (1.1 per week and 1.2 per week in study and control groups, respectively) before the training course. The effective rate in study and control group was 37% (11/30) and 30% (9/30), respectively ( $P > 0.05$ ). Mean increased ejaculatory latency time in study group and control group was 2.6 minutes and 2.8 minutes, respectively. 5 patients in control group complained that they were difficult to reerect their penis again in short time after detumescence during the training course.

No side effects were noted in both groups.

**Conclusion:** Increasing coital frequency appears to provide comparable effect and lesser technique barrier to traditional behavioral therapy in patients with premature ejaculation.

#### PD9-4:

#### EXPLORATION OF THE ASSOCIATION BETWEEN DIETARY INTAKE AND ENDOTHELIAL FUNCTION AMONG VASCULOGENIC ERECTILE DYSFUNCTION POPULATION

Chih-Wei Tsao<sup>1</sup>, Yi-Shun Chen<sup>2</sup>, Tai-Lung Cha<sup>1</sup>, Chin-Yu Liu<sup>2</sup>. <sup>1</sup>Division of Urology, Department of Surgery, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan; <sup>2</sup>Department of Nutritional Science, Fu Jen Catholic University, New Taipei, Taiwan

**Purpose:** The aim of present study was to evaluate the association between dietary intake and endothelial function among the erectile dysfunction males attending for clinics.

**Materials and Methods:** We performed a prospective study between March 2014 and June 2014 at the urology OPD in Tri-Service General Hospital. Forty-four patients were enrolled and filled out the IIEF (the international index of erectile function) questionnaire. The 24-hour dietary recall and peripheral arterial tonometry (PAT) were conducted. Augmentation index (AI%) and reactive hyperemia index (RHI%) were represented systematic arterial stiffness and endothelial-dependent vasodilation respectively.

**Results:** Our final results showed that vegetable intake which portions adjusted by 1000 kcal of, were negatively related to IIEF score. A negative correlation was noted between AI% and IIEF score, and the association between AI% and exchange of whole grain intake was also observed. In addition, RHI% was marked associated with intake of poly-unsaturated fatty acid.

**Conclusion:** Dietary intakes were related to endothelial function among ED patients, especially whole grain products and the vegetables. Detailed the mechanism of pathogenesis should be examined in future larger study.

#### PD9-5:

#### BDNF-HYPERSECRETING HUMAN UMBILICAL CORD BLOOD MESENCHYMAL STEM CELLS PROMOTE ERECTILE FUNCTION IN A RAT MODEL OF CAVERNOUS NERVE ELECTROCAUTERY INJURY

Lu-Jie Song<sup>1,\*</sup>, Jianqiang Zhu<sup>2</sup>, Zhiqiang Cui<sup>3</sup>, Yang Liu<sup>3</sup>, Qiang Fu<sup>1</sup>, Yue-Min Xu<sup>1</sup>, Hongkai Lu<sup>3</sup>. <sup>1</sup>Department of Urology, Shanghai Jiao Tong

University Affiliated Sixth People's Hospital, Shanghai, 200233, China; <sup>2</sup>Department of Urology, the Second Hospital of Tianjin Medical University, Tianjin Institute of Urology, Tianjin, 300211, China; <sup>3</sup>Department of Urology, Weifang Medical University Affiliated Weifang People's Hospital, Weifang, Shandong, 261042, China

**Purpose:** Erectile dysfunction (ED) continues to be a significant problem for men following radical prostatectomy.

**Aim:** To test the hypothesis that intracavernous injection of BDNF-hypersecreting human umbilical cord blood mesenchymal stem cells (hUCB-MSCs) can ameliorate ED in a rat model of cavernous nerve electrocautery injury (CNEI).

**Materials and Methods:** Forty-two male Sprague-Dawley rats were randomly divided into 4 groups. Group A: Sham operation rats intracavernosally injected with PBS (n = 6), Group B: CNEI rats intracavernosally injected with PBS (n = 12), Group C: CNEI rats intracavernosally injected with hUCB-MSCs (n = 12), Group D: CNEI rats intracavernosally injected with BDNF-hUCB-MSCs (n = 12).

**Main Outcome Measures:** At week 4, the rats in each group underwent electrostimulation of the cavernous nerves to assess erectile function. Penile tissues were collected for histological examinations (Masson's trichrome; Immunofluorescence for S-100 and  $\alpha$ -SMA; TUNEL assay). Transmission electron microscopy (TEM) was used to examine the CN distal to the site of injury.

**Results:** Four weeks after injection, rats which received BDNF-hUCB-MSCs showed the most significant improvement in the ratio of maximal ICP to MAP (ICP/MAP) compared with both the CNEI+hUCB-MSCs and CNEI+PBS animals ( $P < 0.001$ ). Histological examinations showed moderate recovery of S-100 positive nerve fibers, ratio of smooth muscle to collagen and smooth muscle content in the CNEI+hUCB-MSCs group and remarkable recovery in the CNEI+BDNF-hUCB-MSCs group compared to the CNEI+PBS group ( $P < 0.05$ ). Furthermore, there was a significant reduction of apoptotic index in the corpus cavernosum of the CNEI+hUCB-MSCs and CNEI+BDNF-hUCB-MSCs rats compared with the CNEI+PBS animals ( $P < 0.05$ ). By TEM examination, atrophy of myelinated and nonmyelinated nerve fibers was noted in CNEI+PBS group, and significant recovery was observed in two treated groups.

**Conclusion:** Intracavernous injection of BDNF-hypersecreting hUCB-MSCs can enhance the recovery of erectile function, promote the CNs regeneration, protect against cells apoptosis and inhibit corpus cavernosum fibrosis after CNEI in a rat model.

**Keywords:** Electrocautery injury, Erectile dysfunction(ED), Radical prostatectomy(RP), Brain-derived neurotrophic factor(BDNF), Human umbilical cord blood mesenchymal stem cells (hUCB-MSCs)

#### PD9-6:

#### EXPERIMENTAL RESEARCH ON THE ESTABLISHMENT AND COMPARISON OF RAT CAVERNOUS NERVE FORCEPS CLAMPED AND ELECTROCOAGULATION INJURY MODEL

Lu-Jie Song<sup>1,\*</sup>, Jianqiang Zhu<sup>2</sup>, Zhiqiang Cui<sup>3</sup>, Yang Liu<sup>3</sup>, Qiang Fu<sup>1</sup>, Yue-Min Xu<sup>1</sup>, Hongkai Lu<sup>3</sup>. <sup>1</sup>Department of Urology, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, Shanghai, 200233, China; <sup>2</sup>Department of Urology, the Second Hospital of Tianjin Medical University, Tianjin Institute of Urology, Tianjin, 300211, China; <sup>3</sup>Department of Urology, Weifang Medical University Affiliated Weifang People's Hospital, Weifang, Shandong, 261042, China

#### Podium-10

#### Urinary Tract Infection

#### PD10-1:

#### FACTORS ASSOCIATED WITH AND TREND OF RESISTANCE TO ANTIBIOTICS AMONG UROPATHOGENS

Ming-Chung Ko<sup>1</sup>, Wen-Kai Lee<sup>1</sup>, Huey-Sheng Jeng<sup>1</sup>, Chih-Kai Yang<sup>1</sup>, Chih-Kuang Liu<sup>1</sup>, Allen Wen-Hsiang Chiu<sup>1,2</sup>. <sup>1</sup>Department of Urology, Taipei City

\* Corresponding author. Lu-Jie Song, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, 600 Yishan Road, Shanghai 200233, China. Tel.: +86 21 64369181; fax: +86 21 64701361.

\* Corresponding author. Lu-Jie Song, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, 600 Yishan Road, Shanghai 200233, China.

Hospital, Taipei, Taiwan; <sup>2</sup>National Yang-Ming University, School of Medicine, Taipei, Taiwan

**Purpose:** To investigate bacterial profile and trend of and factors associated with resistance to antibiotics among uropathogens

**Materials and Methods:** This is a cross sectional study using reports of urine culture from a regional hospital in Taipei city from year 2006 to 2012. Only the report of the first urine culture for each individual was used for analysis. We analyze bacterial profile and rates as well as trend of resistance to commonly prescribed antibiotics among uropathogens. We used logistic regression to identifying independent risk factors, including sex, age, diabetes, indwelling urethral catheterization, urolithiasis, and urinary tract surgery, of resistance to ciprofloxacin for *Escherichia coli*

**Results:** *Escherichia coli* was the most common uropathogen followed by Non-*E. coli* Enterobacteriaceae, *Pseudomonas* spp., and *Enterococcus* spp. The percentage of *Escherichia coli* declined from year 2000 to 2007 although not statistically significant. The percentage of *Enterococcus* spp. increased significantly during study period. The resistance rates of *Escherichia coli* to SXT ranged from 42.1% to 47.6% during study period. The resistance rates of *Escherichia coli* to cefazoline, amoxicillin+clavulanic acid, ciprofloxacin, gentamicin, amikacin, ceftazidime, and imipenem were 33.1–62.3%, 33.5–37.4%, 28.9–34.9%, 29.6%–23.9%, 2.0–3.1%, 6.9–21.7%, and 0.1%–0.1%, respectively. The resistance rates of *Escherichia coli* to cefazoline and ciprofloxacin increased significantly during study period. The resistance rates of Non-*E. coli* Enterobacteriaceae to cefazoline and ciprofloxacin increased significantly during study period. The resistance rates of *Enterococcus* spp. to ampicillin and penicillin increased significantly during study period. Male sex, aged more than 64 years, indwelling urine catheterization, urolithiasis, and urotract surgery are independent risk factors associated with resistance of *Escherichia coli* to ciprofloxacin.

**Conclusion:** Understanding the profile of uropathogens and their resistance pattern to commonly prescribed antibiotics is important in treating urinary tract infection.

#### PD10-2:

#### ANTIMICROBIAL PROPHYLAXIS AND FEBRILE COMPLICATION OF TRANSRECTAL PROSTATE BIOPSY IN TAIPEI TZUCHI HOSPITAL AND IN TAIWAN

Chao-Tse Hung, Chia-Da Lin, Stephen Shei-Dei Yang. Department of urology, Taipei Tzu Chi General Hospital, Taiwan

**Purpose:** To analyze the antimicrobial prophylaxis (AMP) and febrile complications of transrectal prostate ultrasound-guided biopsy (TRUSPBX) in our hospital and review the current status in Taiwan.

**Materials and Methods:** We retrospectively reviewed the patients who underwent TRUSPBX from January 2005 to December 2013 in our outpatient department. The patients were divided into two groups: group 1 contains those who took single dose 500 mg. levofloxacin pre-operatively, and group 2 consists those who received more than one dose of antibiotics regardless of medication category. We analyze the febrile outcome and related risks. We also reviewed some literatures who reported their outcome in other hospitals of Taiwan.

**Results:** Totally 737 patients were included for analysis (628 in Group 1, 109 in group 2). In group 1, 4 patient had fever (0.64%) after operation, while there was no patient experienced febrile complication in group 2 ( $p = 0.9$ ). There were no specific risks for febrile UTI of TRUSPBX in our hospital. The incidence of febrile complications with AMP of single dose levofloxacin is 0.64–1.99% in Taiwan. This regimen was effective and safe as AUA and EUA recommended. More than one dose of antibiotics before or after TRUSPBX is not necessary for patients with low risk of fever.

**Conclusion:** Single dose levofloxacin as AMP for TRUSPBX is safe and effective in Taiwan This regimen should be more widely use in all patients undergoing TRUSPBX with low risk of infection in Taiwan.

#### PD10-3:

#### CLINICAL SIGNIFICANCE OF HPV GENOTYPE, PREFERTIAL LOCATION OR SHAPE OF CONDYLOMA?

Wai Pou Chan<sup>1</sup>, Rich Wu<sup>2</sup>. <sup>1</sup>Chan's Urologic Clinic, Taiwan; <sup>2</sup>Knowledge-care Bioscience Inc., Taiwan

**Purpose:** To identify the role of HPV genotypes in pathogenesis of condyloma. Doesn't it lead to preferential location in human body or special shape of condyloma?

**Materials and Methods:** All patients with problems of condyloma were advised to take HPV DNA check. Procedure performed under patient's permission. Sampling brush was sent to laboratory for HPV DNA analysis by COBAS HPV 4800 automatic system, which contained Roche LINEAR ARRAY HPV Genotyping Test system for 37 known genotypes. Specimen of un-determined type will run auto-sequencing method. Sequence alignments were obtained by Genbank's on-line BLAST server.

**Results:** From Jan.2006 to Dec. 2012, there were 1296 fresh patient with recognizable condyloma. 694 of them were mono-infection (only one HPV genotype identified from lesion). 602 of them were multi-infection (2 to 6 genotypes identified from lesion). Leading 8 types of mono-infection: type 6 in 500 cases, 40 in 33, 44 in 16, 42 in 15, 52 in 15, 58 in 14, 16 in 11, and type 51 in 10 cases. Analysis of mono-infection cases as follow:

	M	F	Age	Location (%)	Shape (%)
Low risk type	440	155	33.9 ± 8.1	m 26.4,s 60.2,ms,13.4	m 7.1, n 62.4, p 25.0,g 5.5
High risk type	42	47	31.3 ± 6.4	m 49.4,s 44.9,ms 5.6	m 14.6,n 52.8, p 31.5,g 1.1

\* Location: m = mucosa, s = skin, ms = mucosa + skin

\* Shape: m = macular, n = nodular, p = papillary, g = giant type

#### Conclusion:

1. All HPV identified were belonging to alpha-HPV, according to International Committee of Taxonomy of Virus (ICTV 2002). Groups of B,  $\gamma$ ,  $\epsilon$ , mupa. etc are not found yet.

2. Condyloma in a contagious disease, initial location of lesion determined mostly by contact area during sexual behavior, rather than HPV genotype.

3. Shape and size of condyloma seems to be a balance of HPV virulence and host immunity. High risk type condyloma tend to be a broad base lesion but low risk type tend to be a cauliflower lesion.

#### PD10-4:

#### ADDING GENTAMYCIN TO FLUOROQUINOLONE-BASED ANTIMICROBIAL PROPHYLAXIS REDUCES TRANSRECTAL ULTRASOUND-GUIDED PROSTATE BIOPSY-RELATED INFECTION RATE

Chi-Hang Hsiao<sup>1</sup>, Tzuo-Yi Hsieh<sup>1</sup>, Yu-Lin Kao<sup>1,2</sup>, Shao-Chuan Wang<sup>1</sup>, Wen-Jung Chen<sup>1</sup>, Sung-Lang Chen<sup>1,2</sup>. <sup>1</sup>Department of Urology, Chung Shan Medical University Hospital, Taichung, Taiwan, ROC; <sup>2</sup>School of Medicine, Chung Shan Medical University, Taichung, Taiwan, ROC

**Purpose:** Transrectal ultrasound(TRUS)-guided prostate biopsy is the standard method for the diagnosis of prostate cancer. Fluoroquinolone-based prophylaxis before a TRUS biopsy of the prostate is the most common regimen worldwide. In this retrospective study, we evaluated the efficacy and cost-effectiveness of adding gentamicin to a fluoroquinolone-based prophylaxis regimen on the patient who received TRUS biopsy of prostate.

**Materials and Methods:** In total, our study included 263 patients across two groups in this study. Group 1 consisted of 129 patients who received one oral dose of 500 mg levofloxacin daily two days before the biopsy, on the day of the biopsy, and for two days after the biopsy. Group 2 consisted of 134 patients who received a single 80 mg intramuscular gentamycin injection 30 minutes before the biopsy in addition to the same oral levofloxacin protocol as group 1. We recorded and analyzed data including age, indication for a TRUS biopsy of the prostate, prostate volume, comorbidity, infectious complications, blood and urine culture results.

**Results:** The mean PSA level was  $38.653 \pm 312.9249$  ng/ml (range 4.4 – 2626 ng/ml) in group 1, and  $34.843 \pm 127.1309$  ng/ml (range 2.11 – 1423 ng/ml) in group 2. The groups were similar in terms of mean age, indication for a biopsy, prostate volume and the number of biopsy cores taken, and comorbidities. Infectious-related complications occurred in 8 of