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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

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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?

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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, γ , ϵ , 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

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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 ± 312.9249 ng/ml (range 4.4 – 2626 ng/ml) in group 1, and 34.843 ± 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

129 (3.0%) and 1 of 134 (0.4%) patients in groups 1 and 2, respectively ($p = 0.02$).

Conclusion: The addition of intramuscular 80 mg of gentamycin was beneficial in improving the efficacy of fluoroquinolone and reducing the post TRUS biopsy infection rate. Gentamycin is relatively inexpensive and readily available in daily practice and has good compliance for patient use.

PD10-5:

EFFECTIVENESS OF GENTAMICIN AND QUINOLONE ON PREVENTION OF INFECTION COMPLICATIONS AFTER PROSTATE BIOPSY – A RETROSPECTIVE STUDY OF 246 PATIENTS

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Purpose: This study was done to compare infectious complications between patients with and without a set protocol for prostate biopsy.

Materials and Methods: Patients whom underwent prostate biopsy at our hospital from 2001 to 2012 were first identified. Two different groups of patients were then selected from two different years. The cut-off year was 2007, which we started to implement a standardized protocol for prostate biopsy. Patient group without set protocol was collected from January 2001 to December 2001. Patient group with set protocol was collected from January 2012 to December 2012.

Results: A total of 246 patients were selected from 2 years. Ninety-two patients were collected from January to December 2001 (without set protocol). One hundred fifty-four patients were collected from January to December 2012 (with set protocol). In the first group, the infectious complication rate was 10.75% (10 out of 93). While in the second group, the infection rate was 1.3% (2 out of 154). All the minor complications (such as hematuria, hematospermia, dysuria, etc) were self-resolving within 1 month. Most infectious complications were all managed during OPD hours with oral antibiotics. Only 1 patient required hospitalization (from 2001). All the positive culture results did not reveal any resistant strain species.

Conclusion: The minor complications were similar in both group and were all self-resolving. Infectious complications were more prevalent in the group without set protocol. Adequate peri-op preparation and post-op antibiotics regimens appears to be helpful in prevention of infectious complications.

PD10-6:

ALTERNATIVE TREATMENT MODALITY OF PERIURETHRAL ABSCESS – TRANSURETHRAL APPROACH METHOD

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Purpose: Periurethral abscess is a life-threatening infection of the male urethra and periurethral tissues. The standard treatment consists of immediate suprapubic urinary drainage and wide debridement. Owing to the further improvement of antibiotics and surgical technique, alternative treatment method might be considered.

Materials and Methods: This report is to present a rare case with periurethral abscess. A 62 year-old male suffered from fever, chillness, dysuria, scrotum uncomfortable, frequency, and urgency for weeks. The following CT showed the lesion of periurethral abscess.

Results: The suprapubic tube cystostomy combined with transurethral endoscopic incision were done smoothly. After 7 days of antibiotics treatment, he discharged from our hospital and there was no recurrent for more than two years.

Conclusion: We present a case of periurethral abscess, which was treated with transurethral endoscopic incision successfully. In a review of the published literatures, antibiotics using was necessary and open debridement was suggested to prevent this life-threatening infection. Debridement need more time and cost to treat it and always made patient uncomfortable. By using transurethral endoscopic drainage, treatment of

periurethral abscess is much easier and made patient more satisfactory about the result.

Podium-11

Oncology

PD11-1:

PREDICTIVE FACTORS FOR DISEASE RECURRENCE IN PATIENTS WITH LOCALLY ADVANCED RENAL CELL CARCINOMA TREATED WITH CURATIVE SURGERY

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Purpose: Radical nephrectomy with or without thrombectomy, and partial nephrectomy for highly selected cases, could be a curative treatment for patients with locally advanced renal cell carcinoma (RCC). However, few prognostic factors have been proposed in such patient group. In the present study, we investigated the possible predictive factors for recurrence after curative surgery for locally advanced RCC

Materials and Methods: Patients with RCC staged T3 or higher without distal metastasis receiving partial or radical nephrectomy with or without thrombectomy in our institute from April 1st 2005 to October 31st 2013 were retrospectively reviewed. Preoperative data including risk groups based on MSKCC and Heng models, as well as surgical and pathologic characteristics were correlated to local-recurrence-free, metastasis-free, and disease-free survival respectively. Kaplan-Meier survival curve and forward stepwise analysis test were used for statistical analysis.

Results: A total of 159 patients (110 were males) were included. Mean age at surgery was 62.2 ± 15.3 years. Other demographic data were shown in the Table. Mean duration of follow-up was 37.9 ± 27.9 months. Local recurrence was noticed in 17 (10.7%), and distal metastases developed in 37 (23.3%). 119 (74.8%) remained disease free. Muscular branch but no renal vein involvement by RCC was noticed in 21 patients undergoing partial nephrectomy, and only one developed local recurrence.

Stage higher than pT3a, papillary cell type, higher Fuhrman grade, and poorer Heng's risk group were associated with shorter local-recurrence-free, metastasis-free, and disease-free intervals on univariate analysis. Poorer MSKCC risk group and thrombocytosis were related to shorter metastasis-free ($p = 0.0001$ and $p = 0.006$ respectively) and disease-free ($p = 0.0001$ and $p = 0.002$ respectively) but not local-recurrence-free intervals. Excess serum alkaline phosphatase was associated with shorter local-recurrence-free interval ($p = 0.032$) only. Other factors including body mass index, blood type, neutrophil-to-lymphocyte ratio, blood transfusion, surgical methods, or positive surgical margin were failed to show any association.

On multivariate analysis, only Heng's risk group and Fuhrman grade had significant association with local-recurrence-free ($p = 0.001$, 95% IC 3.9 – 146.8; $p = 0.021$, 95% CI 1.5 – 88.6, respectively), metastasis-free ($p = 0.0001$, 95% CI 8.8 – 120.5; $p = 0.001$, 95% CI 1.8 – 11.4, respectively), and disease-free survival ($p = 0.0001$, 95% CI 12.8 – 210.3; $p = 0.001$, 95% CI 1.9 – 11.8, respectively).

Conclusion: In patients with locally advanced RCC, Fuhrman grade and Heng's risk group could predict local or distal recurrence after curative surgery. For those undergoing partial nephrectomy, muscular branch involvement could not be a predictive factor.

PD11-2:

COMPARISON OF RADIOFREQUENCY ABLATION VERSUS LAPAROSCOPIC ADRENALECTOMY FOR BENIGN ALDOSTERONE-PRODUCING ADENOMA

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