Background. Community-acquired (CA) UTI caused by ESBL-producing pathogens poses a challenge to initial antibiotic (AB) selection. Better characterization of AB susceptibilities in CA ESBL infections may improve empiric drug selection for outpatient therapy. The objectives of this study were to describe AB susceptibilities of isolates in CA ESBL UTI and provide recommendations for appropriate treatment at our institution.

Methods. Adult patients with CA ESBL UTI (cystitis) from 2009 through 2013 were retrospectively matched 1:1 with a control group of non-ESBL CA UTI based on age within 5 years, gender, and organism. The primary outcome in this phase of the study was description of AB susceptibilities in CA ESBL UTI vs. controls. Secondary outcomes were comparison of appropriate initial AB therapy (defined as concordance of initial AB with in vitro susceptibilities) and development of recommendations for initial antibiotics for CA UTI.

Results. Eighty-five patients were matched into each of the ESBL and non-ESBL CA UTI groups. 

Methods. Adults ≥18 years with ≥3 days of symptoms of a urinary tract infection and a positive urine culture (≥10^5 CFU/mL) were eligible. A random sample of 500 patients was selected over a 6-month period from January 2011 to June 2011 from all inpatient and outpatient hospital settings. Escherichia coli was the most common pathogen in both (69.8% cUTI vs. 70.1% CAUTI). FQs and TMP/SMX were discordant in 83% and 42% of ESBL UTI, respectively, while NF was concordant in 100% of patients with ESBL UTI and 89% of controls.

Conclusion. Patients with CA ESBL UTI were significantly more likely to receive inappropriate initial AB therapy compared with those with non-ESBL UTI. Although ESBL-producing isolates were resistant to multiple AB classes, NF retained activity against 84% of ESBL isolates and was associated with appropriateness of initial therapy in 100% of patients with ESBL UTI. Nitrofurantoin is an appropriate oral option for treatment of CA UTI, even in patients with ESBL infection.

Disclosures. D. N. Fish, Merck & Co.; Grant Investigator, Research grant M. Barron, Merck & Co.; Grant Investigator, Research grant

1138. Prevalence and Accuracy of Screening Test of Asymptomatic Bacteriuria During Pregnancy in Siriraj Hospital Jintana Srisompong, MD1; Suraya Rahman, BSN2; Kusol Russameecharon, MD2; Nattakan Ngai, MD3; Porntip Koonamochai, MD1; 1Medicine, Mahidol University, Bangkok, Thailand; 2Obstetric and Gynecology, Siriraj Hospital, Bangkok, Thailand; 3Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand; 4Medicine, Siriraj hospital, Bangkok, Thailand; 5Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

Session: 143. Clinical: UTI Friday, October 6, 2017: 12:30 PM

Background. The early detection and treatment asymptomatic bacteriuria (ASB) during pregnancy prevents maternal and fetal complication. Thus the American College of OB-GYN recommends urine culture should be obtained at the first prenatal visit and the U.S. Preventive Services Task Force obtains urine culture during 12-16 weeks of gestation. The new antenatal care (ANC) model of our Ministry of Public Health uses screening at first ANC by urine dipstick. However, neither research nor guidelines recommend urine culture test at 12-16 weeks of gestation. The new antenatal care (ANC) model of Thai Ministry of Public Health uses screening at first ANC by urine dipstick. However, neither research nor guidelines recommend urine culture test at 12-16 weeks of gestation. The new antenatal care (ANC) model of Thai Ministry of Public Health uses screening at first ANC by urine dipstick. However, neither research nor guidelines recommend urine culture test at 12-16 weeks of gestation.

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Disclosures. D. N. Fish, Merck & Co.; Grant Investigator, Research grant M. Barron, Merck & Co.; Grant Investigator, Research grant
1141. Contemporary Epidemiology of Catheter-Associated Urinary Tract Infections (CAUTIs) in a Tertiary Care Center: Is Foley Re-Insertion a Novel Risk Factor?  
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Session: 143. Clinical: UTI  
Friday, October 6, 2017: 12:30 PM

Background. CAUTIs are one of the most common causes of hospital-acquired infections. We report on a retrospective analysis performed on prospectively collected CAUTI surveillance data from 2014 to 2016 at a large tertiary care academic hospital. Methods. A total of 181 CAUTIs by NHSN definition were reviewed to describe contemporary demographics, risk factors, microbiology, and outcomes. Results. The 181 CAUTIs involved 178 patients. 61% were female. Events mostly occurred in an ICU setting (65%), specifically our neurosurgical unit (23%), followed by floors (24%) and intermediate units (11%). Most episodes occurred within a week after the initial catheter insertion (60%). 40% of CAUTIs occurred within an average of 5.5 days (SD ± 5.12) after a Foley re-insertion. Of the 221 cultured micro-organisms, Gram-negatives accounted for 74% (predominately K. pneumoniae and E. coli), followed by Gram-positives and yeast at 18% and 8%, respectively. 8% of organisms showed multi-drug resistance, 8% of patients developed C. difficile co-infections, 23% had concomitant bacteremia, and the length of stay averaged 28 days (SD ± 26.74). 55% of patients were discharged to another facility: 12% of patients expired and 4% were discharged to hospice. Conclusion. We describe the contemporary demographics, microbiology and outcomes of CAUTIs in a large tertiary care center. We also found that 40% of our CAUTIs are associated with a Foley removal and re-insertion event. Reasons requiring catheter exchanges and reinsertions include leakage, blooding, obstruction, failed wound healing, and general malfunction. Although this observation needs to be confirmed case control studies and larger observational trials, this new insight may provide an opportunity to intervene and focus infection prevention interventions in this novel high-risk population.

Disclosures. All authors: No reported disclosures.

1143. Percutaneous Nephrostomy Tube-related Infections  
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Session: 143. Clinical: UTI  
Friday, October 6, 2017: 12:30 PM

Background. Percutaneous nephrostomy tubes (PCNs) are indicated for relief of urinary tract obstruction. These devices are prone to mechanical and infectious complications. The infection rate at 90 days is ± 20%. Our objective was to determine whether discordant antimicrobial coverage provided prior to PCN exchange was associated with a higher rate of recurrent infection compared with those who received concordant therapy. Methods. We retrospectively reviewed 780 patients that had undergone initial PCN placement at our institution between July 2014 and February 2017. We only included patients that had developed a definite PCN infection, subsequent PCN exchange, with a minimum 30 day post-PCN exchange follow up. We defined PCN infection as the presence of a positive urine culture (≥10^5 cfu/mL) plus symptoms consistent with a urinary tract infection. Recurrence was defined as a new PCN infection associated with the isolation of the same organism to the initial episode. Antibiotics were defined as concordant if they had activity against all organisms isolated based on antimicrobial susceptibilities. Results. A total of 47 patients met our inclusion criteria. The median age of patients was 59, with 49% being male. The most common underlying tumors were urothelial (45%), cervical (17%) and prostate cancer (15%). Clinical characteristics included ureteral stents (17%), diabetes (19%), history of GU surgery (38%), and active chemotherapy at the time of PCN insertion (70%). The median time to onset of infection was 42 days. Infections were polymicrobial in 50% of the cases. The most common organisms encountered were Pseudomonas spp. (36%), Enterococcus spp. (23%) and Escherichia coli (18%). The median length of follow up of PCN tubes after exchange was 55 days. There were 12 (26%) recurrences occurring at a median time of 27 days. The provision of discordant antibiotics preceding PCN exchange was significantly associated with recurrence of infection (66.7% vs. 12.8%; P = 0.002). Conclusion. Discordant antimicrobial therapy provided during PCN exchange, in the setting of a PCN infection is associated with a higher rate of relapse. Therefore, to decrease the high rate for PCN reinfection, we propose that prior to PCN exchange secondary to infection, patients should be receiving concordant antimicrobial therapy.

Disclosures. All authors: No reported disclosures.

1144. Characterizing Clinical Demographics, Susceptibility Patterns, and Development of Resistance in Raouletella ornitholytica Infections in Southern Virginia  
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Session: 143. Clinical: UTI  
Friday, October 6, 2017: 12:30 PM

Background. Raouletella ornitholytica (R. ornitholytica) is a waterborne Gram-negative bacilli increasingly found in hospitals. Multi-drug resistance has been reported, including to carbapenems. Our objective was to identify demographics of R. ornitholytica at Danville Regional Medical Center (DRMC) to determine predisposing factors to infection and potential antibiotic resistance.