**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. E. coli was the pathogen in 94% of ESBL UTIs and 96% of controls. Patients with ESBL UTI most often received ceftriaxone or oral β-lactam (BL, 31%), fluoroquinolone (FQ, 27%), trimethoprim/sulfamethoxazole (TMP/SMX, 14%), or nitrofurantoin (NF, 14%). controls were similar. Besides non-carbapenem (BLs, ESBL producing significantly more resistant to FQs (78% resistant), NF (16%), TMP/ SMX (60%), gentamicin (33%), and doxycycline (78%) vs. controls (P < 0.01 for each). Ertapenem and amikacin had 100% and 96% susceptibility, respectively. Initial AB were discordant in 64% of ESBL UTI vs. 14% of controls (OR 11.0, 95% CI 5.0–24.3, P < 0.001). 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 than controls. Although ESBL-producing strains 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

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**1138. Prevalence and Accuracy of Screening Test for Asymptomatic Bacteriuria During Pregnancy in Siriraj Hospital**

**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 Thai Ministry of Public Health uses screening at first ANC by urine dipstick. However, neither research nor clinical practice supports screening at first ANC.

**Methods.** A prospective cohort study was performed at the ANC clinic, OB-GYN department, Siriraj Hospital. Pregnancies of first antenatal care visit during January to December 2015 were enrolled. Urine culture (UC), Urine dipstick for nitrite (UDN), and Urine dipstick for leukocyte esterase (UEL) were performed. Subjects’ baseline characteristics until delivery were collected.

**Results.** Total 702 subjects were enrolled; median age, 28 yrs (range 16–45) and body mass index, 24.1 (range 14.0–44.3). The ASB prevalence was 2.3% (16 from 702) without significant difference between first, second, and third trimester, P = 0.185. The most common organism was E. coli. Factors related to ASB were heart disease, P < 0.001 and having sexual intercourse during pregnancy, P = 0.005. The sensitivity and specificity of UDN and UEL were 37.5% and 99.0% and 56.3% and 55.7%, respectively. Positive predictive value and negative predictive value of UDN and UEL were 46.2% and 2.9% and 98.5% and 98.2%, respectively. No abnormal maternal and fetal outcomes were reported.

**Conclusion.** According to very low prevalence of ASB in Siriraj hospital, routine urine culture may be unnecessary for all antenatal pregnancy. However, heart disease and sexual intercourse during pregnancy should be considered for screening and treatment. However, further evaluation of outcome, i.e. UTI, maternal and fetal complication of non-screening for ASB should be studied.

**Disclosures.** All authors: No reported disclosures.

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**1139. Epidemiology, Microbiology and Outcomes of Catheter-Associated Urinary Tract Infection and Complicated Urinary Tract Infection in the USA**

**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. E. coli was the pathogen in 94% of ESBL UTIs and 96% of controls. Patients with ESBL UTI most often received ceftriaxone or oral β-lactam (BL, 31%), fluoroquinolone (FQ, 27%), trimethoprim/sulfamethoxazole (TMP/SMX, 14%), or nitrofurantoin (NF, 14%). controls were similar. Besides non-carbapenem (BLs, ESBL producing significantly more resistant to FQs (78% resistant), NF (16%), TMP/SMX (60%), gentamicin (33%), and doxycycline (78%) vs. controls (P < 0.01 for each). Ertapenem and amikacin had 100% and 96% susceptibility, respectively. Initial AB were discordant in 64% of ESBL UTI vs. 14% of controls (OR 11.0, 95% CI 5.0–24.3, P < 0.001). 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 than controls. Although ESBL-producing strains 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

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**1140. Significance of Prior Culture History for Predicting Urinary Tract Infection Caused by Multi-drug Resistant Enterobacteriaceae**

**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.** A prospective cohort study was performed at the ANC clinic, OB-GYN department, Siriraj Hospital. Pregnancies of first antenatal care visit during January to December 2015 were enrolled. Urine culture (UC), Urine dipstick for nitrite (UDN), and Urine dipstick for leukocyte esterase (UEL) were performed. Subjects’ baseline characteristics until delivery were collected.

**Results.** Total 702 subjects were enrolled; median age, 28 yrs (range 16–45) and body mass index, 24.1 (range 14.0–44.3). The ASB prevalence was 2.3% (16 from 702) without significant difference between first, second, and third trimester, P = 0.185. The most common organism was E. coli. Factors related to ASB were heart disease, P < 0.001 and having sexual intercourse during pregnancy, P = 0.005. The sensitivity and specificity of UDN and UEL were 37.5% and 99.0% and 56.3% and 55.7%, respectively. Positive predictive value and negative predictive value of UDN and UEL were 46.2% and 2.9% and 98.5% and 98.2%, respectively. No abnormal maternal and fetal outcomes were reported.

**Conclusion.** According to very low prevalence of ASB in Siriraj hospital, routine urine culture may be unnecessary for all antenatal pregnancy. However, heart disease and sexual intercourse during pregnancy should be considered for screening and treatment. However, further evaluation of outcome, i.e. UTI, maternal and fetal complication of non-screening for ASB should be studied.

**Disclosures.** All authors: No reported disclosures.