are increasingly common and antifungal resistance is more prevalent in these non-*albicans* species, including *C. glabrata*, *C. parapsilosis*, and *C. tropicalis*, which were the focus of this analysis. **Methods:** We used the PINC AI healthcare data (PHD) database to examine fluconazole resistance for inpatient isolates between 2012 and 2021 from 187 US acute-care hospitals with at least 1 *Candida* spp culture with a fluconazole susceptibility result over the entire period. We calculated annual percentage fluconazole resistance for *C. glabrata*, *C. tropicalis*, and *C. parapsilosis* isolates using the clinical laboratory interpretation for resistance. **Results:** We identified 4,264 *C. glabrata*, 2,482 *C. parapsilosis*, and 2,283 *C. tropicalis* isolates between 2012 and 2021 with susceptibility results. The percentage of *C. glabrata* isolates resistant to fluconazole doubled between 2020 and 2021 (14.6% vs 29.3%) (Fig. 1a). The percentage of *C. parapsilosis* isolates resistant to fluconazole steadily increased since 2017 (Fig. 1b), with an 82% increase in 2021 compared with 2020 (3.8% in 2020 vs 6.9% in 2021). Fluconazole resistance among *C. tropicalis* isolates varied over the years, with a 0.3% decrease in 2021 from 2020 (Fig. 1c). Of hospitals reporting at least 1 result each year 2020–2021, 44% observed an increase in the proportion of *C. glabrata* isolates resistant to fluconazole in 2021 compared to 2020. **Conclusions:** Our analysis highlights a concerning increase in fluconazole resistance among *C. glabrata* and *C. parapsilosis* isolates in 2021 compared with previous years. Further investigation of the observed increases in fluconazole resistance among these *Candida* spp could provide further insight on potential drivers of resistance or limitations in reported results from large databases. More analyses are needed to understand rates, sites of *Candida* infections, and risk factors (eg, antifungal exposure) associated with resistance.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s29–s30

doi:10.1017/ash.2023.255

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Antibiotic Stewardship

Development of a multiyear pediatric antibiogram in Georgia identifies antibiotic resistance trends

Matt Linam; Madeleine Goldstein; Robert Jerris and Mark Gonzalez

Background: Antibiograms are used to monitor antibiotic resistance trends and help guide empiric antibiotic treatment. Community pediatricians may not have access to or be comfortable using children's hospital antibiograms. Creating and disseminating a statewide pediatric antibiogram can help inform antibiotic stewardship efforts.
Objective: To develop a pediatric-specific antibiogram for the state of Georgia. **Methods:** Annual pediatric antibiograms for the 5 children's hospitals in Georgia from 2014 through 2021 were collected. All sites complied with the Clinical and Laboratory Standards Institute guidelines for antibiomicrobic breakpoints and antibiogram development. Antibiogram data were combined, and the most common bacteria were selected to incorporate into the statewide antibiogram: *Staphylococcus aureus*, *Streptococcus pneumoniae*, *Enterococcus faecalis*, *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae* complex, and *Pseudomonas aeruginosa*. Antibiogram data were reported as percentage susceptible and total number of isolates. Interhospital susceptibility differences were compared for methicillin-susceptible *S. aureus* (MSSA), methicillin-resistant *S. aureus* (MRSA), *E. coli*, and *K. pneumoniae* from 2018 through 2021. $P < .05$ was considered significant. The combined antibiogram data from 2014 through 2021 were used to show antibiotic susceptibility trends over time. **Results:** The 2021 antibiogram is shown in the Table. For MSSA and MRSA, clindamycin susceptibility was 80% and 85%, respectively. *K. pneumoniae* susceptibility to amoxicillin-clavulanate was 91%. For *E. coli*, using urine-specific breakpoints, susceptibility to cefazolin was 89%. A few statistically significant differences in antibiotic susceptibility were detected between hospitals, but most were unlikely to be clinically relevant (all susceptibilities ≥90% or < 80%). A notable exception was trimethoprim-sulfamethoxazole susceptibility for *K. pneumoniae*, which ranged from 74% to 98% in 2020 and from 74% to 86% in 2021. From 2014 to 2021, the percentage of MRSA decreased from 49% to 34%. Over the 8 years, susceptibility to ceftriaxone for *E. coli* ranged from 93% to 95% and from 90% to 95% for *K. pneumoniae*. Susceptibility to meropenem for *E. coli* and *K. pneumoniae* ranged from 99% to 100%. **Conclusions:** Antibiotic susceptibility for pediatric bacterial isolates in Georgia remained stable over time and supported the narrow-spectrum empiric antibiotic treatment recommended in national evidence-based guidelines for skin and soft-tissue infections, community-acquired pneumonia, and uncomplicated urinary tract infections. MRSA rates decreased over time and multidrug-resistant gram-negative bacilli were uncommon and remained stable.

Table. Combined Pediatric Antibiotic Susceptibility Data for the Cumulative Year 2021 for the State of Georgia

% susceptible (total number of isolates)	ampicillin	amox/clav	oxacillin	ceftriaxone (non-meningitis)	ceftriaxone (meningitis)	clindamycin	TMP/SMX	vancomycin	linezolid	levofloxacin	nitrofurantoin (urine)
Gram positive organisms											
Methicillin-susceptible *S. aureus*	-	-	100 (1159)	-	-	80 (1152)	99 (1154)	100 (1156)	-	-	-
Methicillin-resistant *S. aureus*	-	-	0 (592)	-	-	85 (588)	97 (592)	99 (592)	-	-	-
Enterococcus faecalis	100 (209)	-	-	-	-	-	-	99 (206)	100 (206)	-	100 (209)
Streptococcus pneumoniae	-	91 (116)	-	98 (129)	85 (122)	9 (128)	-	100 (122)	-	99 (123)	-

	ampicillin	cefazolin	ceftriaxone	ceftazidime	cefepime	pip/tazo	meropenem	gentamicin	tobramycin	amikacin	TMP/SMX	ciprofloxacin	levofloxacin	cefazolin (urine)	nitrofurantoin (urine)
Gram negative organisms															
Escherichia coli	49 (2545)	74 (2338)	94 (2545)	-	95 (2335)	98 (2545)	99 (2105)	92 (2545)	-	99 (2108)	72 (2536)	93 (408)	-	89 (2213)	99 (2604)
Klebsiella pneumoniae	-	87 (410)	92 (410)	-	96 (382)	95 (410)	100 (333)	96 (356)	95 (410)	100 (329)	83 (405)	89 (74)	-	-	34 (405)
Enterobacter cloacae complex	-	-	-	-	88 (125)	-	100 (109)	98 (138)	97 (138)	100 (101)	88 (130)	92 (25)	-	-	-
Pseudomonas aeruginosa	-	-	-	93 (433)	91 (433)	96 (433)	95 (371)	83 (433)	96 (433)	96 (355)	-	98 (84)	93 (110)	-	-

S. aureus is *Staphylococcus aureus*. Amox/clav is amoxicillin/clavulanate. Pip/tazo is piperacillin/tazobactam. TMP/SMX is trimethoprim/sulfamethoxazole.
For a given bacterium, the differences in the total number of isolates is the result of differences in antibiotics included in susceptibility testing for the different hospitals

decreased from 49% to 34%. Over the 8 years, susceptibility to ceftriaxone for *E. coli* ranged from 93% to 95% and from 90% to 95% for *K. pneumoniae*. Susceptibility to meropenem for *E. coli* and *K. pneumoniae* ranged from 99% to 100%. **Conclusions:** Antibiotic susceptibility for pediatric bacterial isolates in Georgia remained stable over time and supported the narrow-spectrum empiric antibiotic treatment recommended in national evidence-based guidelines for skin and soft-tissue infections, community-acquired pneumonia, and uncomplicated urinary tract infections. MRSA rates decreased over time and multidrug-resistant gram-negative bacilli were uncommon and remained stable.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s30

doi:10.1017/ash.2023.256

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Antibiotic Stewardship

Initial blood culture collection practices and the associated factors upon continued empiric piperacillin-tazobactam usage

Satoshi Kitaura; Koh Okamoto; Ryo Yamaguchi; Takehito Yamamoto; Toshiyuki Kishida; Daisuke Inoue; Hirotaka Miyashita; Masayuki Ueda; Hideki Hashimoto; Sohei Harada; Shu Okugawa; Takeya Tsutsumi and Kyoji Moriya

Background: Approaches to the prescription behavior of broad-spectrum antibiotics, including preauthorization and prospective audit and feedback (PAF), are a focus of antimicrobial stewardship (ASP). However, preprescription behavior, such as blood-culture collection before empiric prescription, is understudied and merits more attention given its influence on the usage of broad-spectrum antibiotics. At the University of Tokyo Hospital, carbapenems are subject to PAF, which has resulted in a compensatory increase in piperacillin-tazobactam use. To evaluate the inherent preprescription behavior associated with a broad-spectrum antibiotic, we investigated the initial blood-culture collection practices upon hospitalization in patients who were continued on empiric piperacillin-tazobactam. **Methods:** A retrospective observational study was conducted at the University of Tokyo Hospital, a tertiary-care hospital in Tokyo, Japan. Patients who were administered piperacillin-tazobactam on the day of hospitalization between April 2016 and December 2017 were included. Patients aged <=18 years and/or patients who discontinued piperacillin-tazobactam within two days were excluded. Only 1 admission per patient was kept for analysis. The medical records of 250 randomly selected patients were reviewed to obtain data on demographics, blood-culture collection, severity, specialties, and risk factors for multidrug-resistant organisms. A multivariable logistic regression analysis was used to identify factors associated with blood-culture collection. **Results:** In total, 960 discrete patients fulfilled the study criteria. Of the randomly selected 250 patients, blood cultures were collected from 162 patients (64.8%), and microbial growth was observed in 30 cases (18.5%). Enterobacterales