1231. Patient-Level Factors Associated with Vancomycin-Resistant Enterococci Transmission in an Internal Medicine Setting

**Background.** Vancomycin-resistant Enterococcus (VRE) is transmitted from person-to-person, most commonly by healthcare workers (HCW) whose hands or attire have become contaminated while interacting with an infected or colonized patient. Our group recently found that VRE colonized patients transmitted this pathogen to HCW gowns or gloves 15% of the time. This study aims to describe patient-level factors associated with higher risk of transmission of VRE to HCW gowns or gloves and thus to subsequent healthy patients of those of animal origin (distributed among a number of smaller early-branching subclades). A further split within the clinical subclade (subclade II) that diverged around 371 years ago was also evident. Latin American isolates were distributed within subclades I (48%) and II (42%). Isolates in “animal” branches exhibited an average recombination of 34 Kbp, where it was 5 Kbp and 21 Kbp for subclades I and II, respectively. More resistance determinants were found in subclade II (62%), followed by I (54%) and absence of cas 1 was the norm in the clinical subclades.

**Conclusion.** Inclusion of E. faecium isolates from diverse geographical regions supports a continuous evolution of these organisms causing human infections. Important evolutionary events seem to favor emergence of novel subclades capable to cause important morbidity and mortality.

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

1233. An Automated E-mail Notification Systemic to Infectious Disease Specialists and Effect on the Management of *Staphylococcus aureus* Bacteremia in a Community Hospital Setting

**Background.** *Staphylococcus aureus* is the leading cause of community and healthcare-associated bacteremia and carries a high burden with a substantial mortality, ranging from between 20 to 40%. Evidence suggests infectious disease (ID) consultation improves mortality and adherence to the Infectious Diseases Society of America (IDSA) guidelines. Due to complications from a lack of ID consultation, a notification system consisting of automated e-mails to ID providers was implemented. The objective of this study was to review the impact of the automatic notification to ID consultants with positive blood culture results in a community hospital system.

**Methods.** Cases of *staphylococcus aureus* bacteremia were identified from the microbiology database by at least one positive blood culture. The automated e-mail notification system was implemented in December 2014. ID providers were encouraged to verbally contact primary providers for positive results. Cases of bacteremia prior to implementation of the automated notification system were compared with those post-intervention. Patients under age 18 were excluded. Data gathered included mortality, re-admission rates, and compliance with IDSA guidelines.

**Results.** There were no significant differences in inpatient mortality (9 vs. 18%, P = 0.180). 30-day mortality between the two groups (18 vs. 20%, P = 0.815). The 30-day re-admission rate among surviving patients was reduced by 50% (40% vs. 19%, P = 0.014). Compliance with antibiotic duration in complicated bacteremia increased post-intervention (57% vs. 85%, P = 0.04).

**Conclusion.** An automatic notification to ID specialists reporting patients with *Staphylococcus aureus* bacteremia led to improved compliance with IDSA guidelines regarding antibiotic duration and reduced re-admission rates. There was no effect on overall mortality.

### Table 1: Patient Demographics

|                      | Pre Intervention (N = 57) | Post Intervention (N = 60) | P value |
|----------------------|--------------------------|----------------------------|---------|
| Average patient age (years) | 64.4                     | 62.2                       | 0.448   |
| Male                 | 63%                      | 63%                        | 1       |
| Immunosuppressed     | 16%                      | 13%                        | 0.80    |
| Complicated bacteremia| 70%                      | 69%                        | 1       |

### Table 2: Patient Outcomes

|                      | Preintervention (N = 57) | Postintervention (N = 60) | P value |
|----------------------|--------------------------|----------------------------|---------|
| Inpatient mortality  | 9%                       | 18%                        | 0.190   |
| 30-day mortality (%) | 18%                      | 20%                        | 0.815   |
| Readmitted within 30 days | 40%                     | 19%                        | 0.014   |
| Bedside ID consult   | 75%                      | 78%                        | 0.888   |
| Appropriate antibiotic duration | 57%                  | 85%                        | 0.04    |

All authors: No reported disclosures.