### 477. Comparison of Clinical Characteristics and Outcomes Between Community-Acquired and Healthcare-Associated Bacteremia Cases due to Bacteroides Species

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**Background.** Differences in clinical characteristics and outcomes between community-acquired (CA) and healthcare-associated (HCA) Bacteroides bacteremia cases are not well known.

**Methods.** We evaluated all positive blood cultures between March 2012 and December 2016 in a Japanese 781-bed acute hospital. Identification and susceptibility of pathogens was performed based on CLSI criteria, and MALDI-TOF was used since January 2015 in addition to conventional methods.

**Results.** Of 3611 bacteremia cases, 266 (7.4%) were due to obligately anaerobic bacteria, such as *Clostridium* species (*n* = 97 [36.5%]), *Fusobacterium* species (15 [7.5%]), and *Bacteroides* species (65 [24.4%]), of which 31 (47.7%) were HCA and 34 (52.3%) were CA. In 22 (33.8%) cases, > 2 blood cultures were positive. *B. fragilis* was most frequently isolated (*n* = 25 [38.5%]), then *B. thetaiotaomicron* (*n* = 9 [13.8%]), *B. vulgatus* (*n* = 5 [7.7%]), *B. uniformis* (*n* = 3 [4.6%]), *B. distasonis* (*n* = 2 [3.1%]), *B. r stretchii* (*n* = 2 [3.1%]), *B. capillosus* (*n* = 1 [1.5%]), and *B. ovatus* (*n* = 1 [1.5%]). After introducing MALDI-TOF, the number of unidentified *Bacteroides* species fell from 12 (18.5%) to 5 (7.7%). Sensitivity to ampicillin/sulbactam, cefmetazole, and clindamycin was 85.2%, 92.6%, and 59.3%, respectively. Most bacteremia (51 [78.5%]) were of intra-abdominal origin. Baseline characteristics and immunocompromised status of HCA and CA bacteremia patients were similar, except for diabetes, which was more frequent in HCA cases (Table). There was significantly higher 7- and 30-day mortality in HCA than in CA cases (*P* = 0.03).

**Conclusion.** The higher mortality in HCA *Bacteroides* bacteremia suggests the need for appropriate multidisciplinary management of these cases.

#### Comparison of HCA vs. CA bacteremia episodes due to Bacteroides species

| CA (n = 31) | HCA (n = 34) | P-value |
|------------|-------------|---------|
| Mean age (SD) | 75.2 (11.6) | 68.3 (17.5) | 0.28 |
| Male | 22 (75.9) | 27 (77.2) | 0.78 |
| Diabetes | 3 (10) | 13 (38.3) | 0.04 |
| Solid tumor | 9 (31) | 16 (45.7) | 0.31 |
| *B. fragilis* | 8 (26.7) | 15 (48.5) | 0.02 |
| *B. thetaiotaomicron* | 5 (17.2) | 4 (11.8) | 0.88 |
| 7-day mortality | 0 (0) | 6 (16.7) | 0.03 |
| 30-day mortality | 2 (7.4) | 11 (30.6) | 0.003 |
| Mean length of stay | 35.7 (26.5) | 40.1 (15.3) | 0.33 |
| after bacteremia (SD) | Polymicrobial bacteremia | 13 (44.8) | 14 (37.8) | 0.62 |

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

### 478. Hospital Onset *Staphylococcus aureus* Bacteremia is a Better Measure than MRSA Bacteremia in Assessing Infection Prevention: Evaluation of 51 US Hospitals

**Mohamed Fakh, MD, MPH; Rebecca Battjes, MPH; Lisa Sturm, MPH; Lindsey Jones, BS; Clariceia Groves, MS; Angelo Bufalino, PhD and Ann Hendrich, PhD, RN**

**Session:** 57. HAI: Surveillance + Reporting Thursday, October 5, 2017: 12:30 PM

**Background.** There was significantly higher 7- and 30-day mortality in HCA than in CA cases (*P* = 0.03). After introducing MALDI-TOF, the number of unidentified *Bacteroides* species fell from 12 (18.5%) to 5 (7.7%). Sensitivity to ampicillin/sulbactam, cefmetazole, and clindamycin was 85.2%, 92.6%, and 59.3%, respectively. Most bacteremia (51 [78.5%]) were of intra-abdominal origin. Baseline characteristics and immunocompromised status of HCA and CA bacteremia patients were similar, except for diabetes, which was more frequent in HCA cases (Table). There was significantly higher 7- and 30-day mortality in HCA than in CA cases (*P* = 0.03).

**Conclusion.** The higher mortality in HCA *Bacteroides* bacteremia suggests the need for appropriate multidisciplinary management of these cases.

#### Comparison of HCA vs. CA bacteremia episodes due to Bacteroides species

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|------------|-------------|---------|
| Mean age (SD) | 75.2 (11.6) | 68.3 (17.5) | 0.28 |
| Male | 22 (75.9) | 27 (72.2) | 0.78 |
| Diabetes | 3 (10) | 13 (38.3) | 0.04 |
| Solid tumor | 9 (31) | 16 (45.7) | 0.31 |
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**Disclosures.** All authors: No reported disclosures.

### 479. Preventability of Hospital Onset Bacteremia and Fungemia: A Pilot Study of a Potential New Indicator of Healthcare-Associated Infections

**Raymund Dantes, MD, MPH; Clare Rock, MD MS; Aaron M. Milstone, MD, MHS; DDSA, FSHA; Jesse T. Jacob, MD, MS; Shierry Chervenksy-Tejedor, MD, MS**

**Session:** 57. HAI: Surveillance + Reporting Thursday, October 5, 2017: 12:30 PM

**Background.** There was significantly higher 7- and 30-day mortality in HCA than in CA cases (*P* = 0.03). After introducing MALDI-TOF, the number of unidentified *Bacteroides* species fell from 12 (18.5%) to 5 (7.7%). Sensitivity to ampicillin/sulbactam, cefmetazole, and clindamycin was 85.2%, 92.6%, and 59.3%, respectively. Most bacteremia (51 [78.5%]) were of intra-abdominal origin. Baseline characteristics and immunocompromised status of HCA and CA bacteremia patients were similar, except for diabetes, which was more frequent in HCA cases (Table). There was significantly higher 7- and 30-day mortality in HCA than in CA cases (*P* = 0.03).

**Conclusion.** The higher mortality in HCA *Bacteroides* bacteremia suggests the need for appropriate multidisciplinary management of these cases.

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| Mean length of stay | 35.7 (26.5) | 40.1 (15.3) | 0.33 |
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**Disclosures.** All authors: No reported disclosures.