Clostridioides difficile infection is a leading cause of healthcare-associated diarrhea. The epidemiology and characteristics of C. difficile vary geographically. We performed toxin enzyme immunoassay (EIA), toxicogenic gene analysis, antimicrobial susceptibility tests (AST), and PCR ribotyping to elucidate the characteristics of C. difficile in Korea.

Methods. Between July 2017 and June 2018, C. difficile was prospectively isolated in 128 specimens from the culture of 1,182 unduplicated specimens. Seventy-five stool specimens with a positive toxin EIA between July 2016 and June 2017 were also included. We performed PCR for the tcdA and tcdB genes on these isolates, and AST and PCR ribotyping on the isolates with a positive toxin EIA.

Results. Older patients tended to have a higher rate of positive toxin EIA and positive cultures than did younger patients. Ribotype 018 was predominately identified (48.6%), followed by ribotype 014/020 (9.9%), and ribotype 002 (8.3%). All of A+B+ isolates were either ribotype 017 or B-2. Ribotypes 017, 018, and B-2 showed high resistance to various antibiotics. In contrast, ribotypes 002, 014/020 and C-4 demonstrated low resistance rates, except that to moxifloxacin in ribotype 002. Clindamycin and erythromycin showed a positive correlation. Most of the isolates resistant to rifampicin or tetracycline showed a high MIC to both erythromycin and clindamycin.

Conclusion. Ribotype 018, which is highly transmissible and resistant to various antimicrobial agents, is predominant in Korea. Ribotype 002 has also been increasing in prevalence in Korea.

Disclosures. All authors: No reported disclosures.

2372. PCR Ribotype and Antimicrobial Susceptibility of Clostridioides (Formerly Clostridium) difficile in Korea
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Session: 251. HAI: C. difficile - Epidemiology
Saturday, October 5, 2019: 12:15 PM

Background. Clostridioides difficile infection is an emerging cause of healthcare-associated diarrhea. The epidemiology and characteristics of C. difficile vary geographically. We performed toxin enzyme immunoassay (EIA), toxicogenic gene analysis, antimicrobial susceptibility tests (AST), and PCR ribotyping to elucidate the characteristics of C. difficile in Korea.

Methods. Between July 2017 and June 2018, C. difficile was prospectively isolated in 128 specimens from the culture of 1,182 unduplicated specimens. Seventy-five stool specimens with a positive toxin EIA between July 2016 and June 2017 were also included. We performed PCR for the tcdA and tcdB genes on these isolates, and AST and PCR ribotyping on the isolates with a positive toxin EIA.

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