

ORAL ABSTRACTS

107. Epidemiologic Review of Carbapenem-Resistant *Enterobacteriaceae* and Duodenoscopes in the Department of Veterans Affairs

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Background. Recent investigative reports have described transmission of carbapenem-resistant *Enterobacteriaceae* (CRE) infections linked to endoscopic retrograde cholangiopancreatography (ERCP) or endoscopic ultrasonography (EUS). We conducted an epidemiologic review to determine whether there was evidence that Veterans may have become infected with CRE following ERCP/EUS.

Methods. The Department of Veterans Affairs (VA) data warehouses were queried

for relevant Current Procedural Terminology and International Classification of Diseases 9 codes for ERCP and EUS procedures performed in VA or outside facilities and CRE isolates recovered from January 1, 2010 to February 28, 2015. CRE was identified using the current the Centers for Disease Control and Prevention definition and characterized according to isolation by United States Census area, bacterial species, and anatomic site. From this dataset, clusters or pairs of patients having ERCP/EUS procedures within a 6-month period of each other at the same VA medical center (or same non-VA facility) that had positive cultures for the same CRE genus/species and same duodenoscope model/serial number underwent medical record review.

Results. There were 55,676 ERCP/EUS procedures performed in 40,329 Veterans and 4914 CRE isolates (any anatomic source) from 2383 unique Veteran patients. *Klebsiella* was the most common CRE genus identified in all geographic regions. CRE was isolated most frequently in the urine (2915 isolates; 59%). Ninety-five patients from 38 VA medical centers were identified as having had an ERCP/EUS (total 146 procedures) and at least one CRE isolate; 20 had CRE pre-procedure only, 61 post-procedure only, and 14 had CRE cultures pre- and post-procedure. Fourteen patients had CRE bacteremia, and 17 patients had CRE isolated from biliary tract or gastrointestinal sources post-procedure. The time between ERCP/EUS and CRE isolation ranged from 1 to 1742 days. After eliminating sites with no patient clusters or pairs and those where the above criteria were not met, 41 pairs at 7 medical centers underwent review. Of the 41 pairs, 36 were ruled out; transmission in the remaining 5 was considered highly unlikely based on clinical information.

Conclusion. Our findings do not provide evidence of CRE transmission related to ERCP/EUS in VA.

Disclosures. All authors: No reported disclosures.

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