Disclosures. D. Weber, PDI: Consultant, Consulting fee. W. Rutala, PDI: Consultant and Speaker’s Bureau, Consulting fee and Speaker honorarium.

1144. Modern Problem, Medieval Cure-Resistant Aeromonas in Medicinal Leeches
Leighanne Olivia Parkes, MD, FRCPC; 1 Kevin Barker, PhD; 1 Susan M. Poutanen, MD, MPH, FRCPC 2; Jennifer M. Grant, MDCM, FRCPC 2; Michael Libman, MD, FRCPC 2; Jerome Leis, MD, MSc, FRCPC 2; Patrick Stapleton, MB 6; Michael Silverman, MD, FRCP, FACP 1, 10 and Susy Hota, MD, MSc, FRCPC 11; 1Division Infectious Diseases and Department of Medicine, University Health Network, Toronto, ON, Canada; 2Department of Infection Prevention and Control, University Health Network, Toronto, ON, Canada; 3Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada; 4Mount Sinai Hospital, Toronto, ON, Canada; 5Vancouver General Hospital, Vancouver, BC, Canada; 6Infectious Diseases, McGill University, Montreal, QC, Canada; 7Sunnybrook Health Sciences Centre, Toronto, ON, Canada; 8Public Health Ontario Laboratories, Toronto, ON, Canada; 9Schulich School of Medicine & Dentistry at Western University, London, ON, Canada; 10Infectious Diseases, St. Joseph’s Health Care and London Health Sciences Centre, London, ON, Canada; 11Infection Prevention and Control, University of Toronto, Toronto, ON, Canada

Session: 135. Healthcare Epidemiology: Environmental and Occupational Health
Friday, October 5, 2018: 12:30 PM

Background. Medicinal leeches are used primarily in plastic and reconstructive surgery when venous congestion threatens tissue viability. The associated infection risk ranges from 4.3 to 20%. Prophylactic antimicrobials such as fluoroquinolones (FQ) or trimethoprim-sulfamethoxazole (SXT) are recommended and target commonly isolated pathogen and gut symbiont, Aeromonas. However, resistance to these agents has been reported and detected in leeches, including at hospital systems across Canada that acquire their stock from the same supplier. Our objective was to describe the local epidemiology of leech-related Aeromonas resistant to one or more commonly used prophylactic agents, and determine if such resistance originates from the common supplier.

Methods. Six hospital systems across Canada using leech therapy, purchased from the same supplier, were surveyed. A 5-year retrospective review of all antimicrobial resistant leech-related Aeromonas, derived from clinical, leech, and tank fluid specimens was performed. All Aeromonas resistant to either FQ or SXT were included, and retained frozen isolates from each system were analysed by pulse-field gel electrophoresis (PFGE) using a published Aeromonas protocol.

Results. All six hospital systems reported leech-related Aeromonas resistant to one or more antimicrobials, totalling 15 isolates. Three systems only reported data from the last year. Four systems used FQ and two used SXT as prophylaxis. Fifteen of 15 were either FQ resistant or intermediate, and four of 15 were SXT resistant. Three of 10 isolates tested for cetratrazox (CRO) susceptibility were resistant. Five of 15 of the isolates were resistant to two or more agents. Of the two leech quality control isolates, 2/2 were FQ resistant and 1/2 was FQ, SXT and CRO resistant. Only three isolates, each from a different, geographically distinct hospital system, had been retained. PFGE analysis indicated 2/3 are closely related (Figure 1).

Conclusion. Our preliminary investigation suggests that the presence of FQ and SXT resistance in leech-related Aeromonas might be more common than previously suspected, and that such resistance might originate from a common source. A broader study of the molecular epidemiology of leech-related Aeromonas is warranted.

Disclosures. All authors: No reported disclosures.

1145. Sparring With Spores: Ultrasounds as a Vector for Pathogen Transmission in the Intensive Care Unit
Amrita John, MBBS; Aanchal Kapoor, MD; Thiveen Sankar Chittoor Mana, MS; Annette Jenson, BSMT(ASCP)SM, CIC; Jennifer Cadnum, R.S.; Abhishek Deshpande, MD, PhD and Curtis J. Donskey, MD; 1Critical Care Medicine, Cleveland Clinic Foundation, Cleveland, Ohio; 2Case Western Reserve University, Cleveland, Ohio; 3Research Service, Louis Stokes Cleveland VA Medical Center, Cleveland, Ohio; 4Research Service, Cleveland VA Medical Center, Cleveland, Ohio; 5Department of Infectious Diseases, Cleveland Clinic, Cleveland, Ohio; 6Infectious Diseases, Case Western Reserve University, Cleveland, Ohio

Session: 135. Healthcare Epidemiology: Environmental and Occupational Health
Friday, October 5, 2018: 12:30 PM

Background. Portable equipment that is shared among patients can be a potential source of pathogen dissemination. In busy healthcare settings, cleaning of shared medical equipment may be suboptimal. In addition, equipment such as ultrasound probe heads present a challenge because sporidical cleaning solutions such as bleach cannot be used.

Methods. We conducted a culture survey of ultrasounds in 15 intensive care units (ICUs) at a large tertiary care referral center, including medical, surgical, neurology, cardiology, and cardiovascular ICUs. Multiple high-touch surfaces on different types of ultrasound equipment used in the ICUs were swabbed to assess for the presence of Clostridium difficile and antibiotic-resistant Gram-negative bacilli. To assess cleaning, a fluorescent marker visible only under UV light was placed on high-touch surfaces on each of the cultured ultrasounds and a black light was used to determine if the marker was removed after 24 hours and again after 1 week.

Results. Of 15 ultrasounds cultured, 7% were contaminated with C. difficile spores and 7% were contaminated with Gram-negative bacilli. Based on fluorescent marker removal, only 28% of the ultrasounds were cleaned within 24 hours and only 3% were cleaned within 1 week. Ultrasounds with touchscreen were cleaned more frequently than those with no touchscreen. For equipment with a combination of touchscreen features and knobs, the touchscreens were cleaned more often than the knobs which often had residual marker even after 7 days.

Conclusion. Ultrasound equipment can be a vector for transmission of C. difficile and other pathogens in critical care settings. In our facility, cleaning of ultrasound equipment was suboptimal, particularly for ultrasounds that did not have a touchscreen interface. Since ultrasounds are being employed in critical care settings with increasing frequency, there is a need for improved methods for cleaning and disinfection.

Disclosures. A. Deshpande, 3M: Investigator, Research grant. Clorox: Investigator, Research grant. STERIS: Investigator, Research grant.