

Alcavis Protocol Improves Peritonitis Rates by Reducing Touch Contamination

Joseph Clere

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- **All authors were employed at DaVita HealthCare Partners, Inc., Denver, CO, USA, at the time of the study:**
 - **Joseph Clere, BS**
 - **Levi Njord, MSc**
 - **Michelle Cassin, RN, CPDN**
 - **Stephanie Motter, BA, RN, MSN**
 - **John Moran, MD, FRACP, FACP**

Background

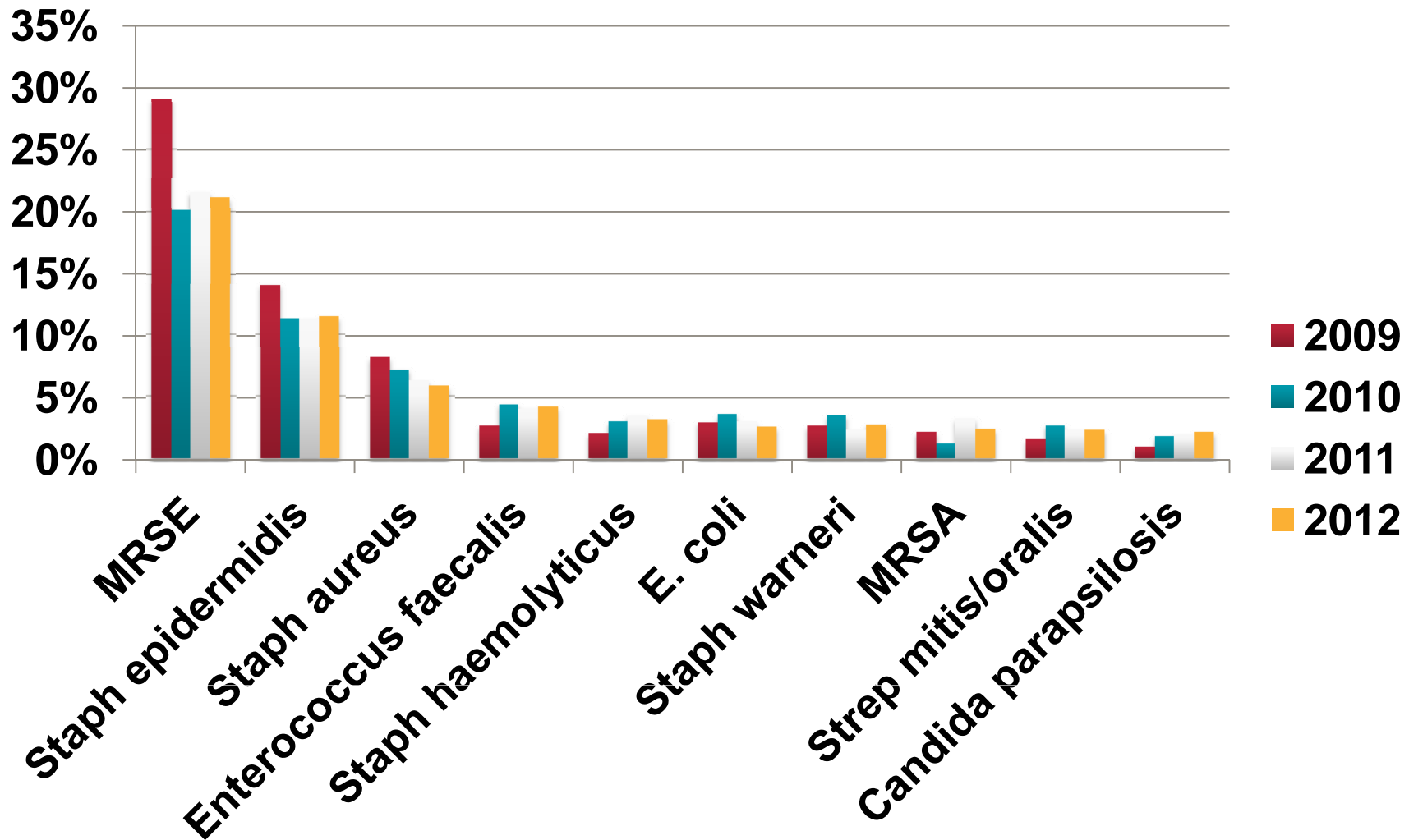
- **Clean exchange procedure and proper connection technique are essential in the prevention of peritonitis**
- **However, touch contamination remains the leading cause of peritonitis in peritoneal dialysis patients**

Reducing Peritonitis Episodes

- **We implemented the Alcavis Protocol, an infection control initiative, to reduce touch contamination and peritonitis episodes**
 - **Electrolytically produced sodium hypochlorite (Alcavis 50) was used to scrub transfer set connections before and after peritoneal dialysis system connection and disconnection**
 - **We followed the technique described by Funes *et al* (ADC, 2009)**

Organism Distribution Before and After Alcavis Protocol

Top 10 Organisms by Percent



Top Ten Organisms by % of Cultures

	2009	2010	2011	2012
MRSE	29.1	20.2	21.5	21.1
Staph epidermidis	14.1	11.3	11.3	11.5
Staph aureus	8.2	7.2	6.3	5.8
Enterococcus faecalis	2.6	4.4	4.0	4.1
Staph haemolyticus	2.1	3.0	3.4	3.1
E. coli	2.9	3.6	3.0	2.5
Staph warneri	2.6	3.5	2.3	2.7
MRSA	2.1	1.2	3.2	2.4
Strep mitis/oralis	1.5	2.7	2.3	2.3
Candida parapsilosis	1.0	1.8	2.0	2.1

Percentage Decrease in Top 3 Organisms

Organism	From 2012 to 2009
MRSE	27.6%
Staph epidermidis	18.6%
Staph aureus	28.3%

All gram+ organisms

Results

- **Consistent with the hypothesis of reduction in touch contamination by the Alcavis protocol, we found a marked reduction in the percentage of episodes due to Gram-positive organisms**

Conclusion

- **Peritonitis episodes became much less frequent after the implementation of the Alcavis protocol.**
- **The use of Alcavis 50 is a simple, safe and cost-effective strategy to decrease episodes of peritonitis related to touch contamination.**

Questions and Answers