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Australian infection control in endoscopy consensus statements on carbapenemase-producing Enterobacteriaceae

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Abstract

Outbreaks of carbapenemase-producing Enterobacteriaceae clinical infections related to endoscopic transmission are well documented. The high morbidity and mortality associated with these infections emphasizes the need to reassess endoscopic reprocessing protocols. The Gastroenterological Society of Australia established a multi-society committee to formulate evidence-based consensus statements on the prevention and management of endoscopic transmission of carbapenemase-producing Enterobacteriaceae. A literature search was undertaken utilizing the MEDLINE database. Further references were sourced from published paper bibliographies. Nine statements were formulated. Using the Delphi methodology, the statements were initially reviewed electronically by the committee members and subsequently at a face-to-face meeting in Melbourne, Australia. After further discussion, four additional sub-statements were added resulting in a total of 13 statements. Each statement was assessed for level of evidence, recommendation grade and the voting on recommendation was recorded. For a statement to be accepted, five out of six committee members had to "accept completely" or "accept with some reservation." All 13 statements achieved consensus agreement. Eleven statements achieved 100% "accepted completely." Two statements were 83% "accepted completely" and 17% "accepted with some reservation." Of particular significance, automated flexible endoscope reprocessors were mandated for high-level disinfection, and the use of forced-air drying cabinets was mandated for endoscope storage. These evidence-based statements encourage preventative strategies with the aim of ensuring the highest possible standards in flexible endoscope reprocessing thereby optimizing patient safety. They must be considered in addition to the broader published guidelines on infection control in endoscopy.

Keywords: CPE; carbapenemase-producing Enterobacteriaceae; duodenoscope; endoscopy; infection.

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