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BACTERIOLOGY

Online-Only Abstract

KPC-2 and OXA-48 carbapenemase-harbouring Enterobacteriaceae detected in an Austrian wastewater treatment plant

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Original Submission: 25 March 2013; Revised Submission: 4 July 2013; Accepted: 14 July 2013 Editor: R. Cantón Article published online: 18 July 2013 Clin Microbiol Infect 2014; 20: O132–O134 10.1111/1469-0691.12336

Abstract

Multiresistant Enterobacteriaceae, like carbapenemase-producing strains, have their primary reservoir in medical institutions. They can also be found with increasing tendency in other reservoirs. One possible way for entrance of multiresistant Enterobacteriaceae into the environment is via waste water. The aim of the study was to screen isolates from a wastewater treatment plant for the presence of carbapenemase-producing Enterobacteriaceae. Three isolates harboured carbapenemase genes, one *Klebsiella pneumoniae* harboured KPC-2 and one *K. pneumoniae* and one *Escherichia coli* harboured OXA-48. This is the first report of carbapenemase-harbouring Enterobacteriaceae inductor is isolated outside medical institutions in Austria and the first detection of KPC-harbouring *K. pneumonia* MLST ST 1245.