

POSTER PRESENTATION

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Absence of *Clostridium difficile* stool carriage in asymptomatic volunteers

M Hell^{1*}, K Sickau¹, G Chmelizek¹, JM Kern², M Maass², S Huhulescu³, F Allerberger³

From International Conference on Prevention & Infection Control (ICPIC 2011)
Geneva, Switzerland. 29 June – 2 July 2011

Introduction / objectives

Clostridium difficile is considered a leading cause of hospital-acquired diarrhea. Currently there are published case-reports of symptomatic Health-Care-Workers (HCW) and one report demonstrating transmission of *C. diff* from patient to HCW. Therefore, we initiated a prospective study to evaluate the prevalence of asymptomatic *C. difficile* stool carriage among healthcare workers at a single university hospital comparing them to non-healthcare workers to assess the risk for HCW's acquiring *Clostridium difficile*.

Methods

The study population consisted of 113 healthy HCW's of clinical departments with a high incidence of CDI in inpatients. The 128 controls were taken from the administration department of a Food Company and from frozen stool samples of healthy subjects from a colon cancer screening program. Both groups were comparable in age- and sex-distribution. From April to July 2010, in total 241 stool specimens were tested for toxigenic culture of *C. diff*. 51% of stool samples (58/113) of the study population and all control-samples (n=128) were confirmed by broth enrichment technique at the National Reference Laboratory for *C. difficile* in Vienna.

Results

Both investigated study-groups (n-total = 241) were negative for *Clostridium difficile* by both culture techniques (direct plating and broth enrichment method).

Conclusion

We conclude, therefore, that healthy HCWs are probably not at risk for acquiring *C. diff* spores from contacts

with CDI-patients. They are themselves no risk for spreading *C. diff* spores in health-care facilities. Data about *C. diff* carriage in the community (up to 3%) demonstrates a possible overestimation.

Disclosure of interest

None declared.

Author details

¹Dep.of Hospital Epidemiology and Infection Control, University Hospital Salzburg, Salzburg, Austria. ²Institut of Hygiene, microbiology and infectious diseases, University Hospital Salzburg, Salzburg, Austria. ³National Reference Laboratory for *Clostridium difficile*, Austrian Agency for Health and Food Safety (AGES), Vienna, Austria.

Published: 29 June 2011

doi:10.1186/1753-6561-5-S6-P183

Cite this article as: Hell et al.: Absence of *Clostridium difficile* stool carriage in asymptomatic volunteers. BMC Proceedings 2011 5(Suppl 6):P183.

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¹Dep.of Hospital Epidemiology and Infection Control, University Hospital Salzburg, Salzburg, Austria
Full list of author information is available at the end of the article