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Clinical and microbiological characteristics of community-onset *Clostridium difficile* infection in The Netherlands.

Bauer MP, Veenendaal D, Verhoef L, Bloembergen P, van Dissel JT, Kuijper EJ.

Department of Infectious Diseases, Leiden University Medical Centre, Leiden, The Netherlands. m.p.bauer@lumc.nl

To elucidate the prevalence, characteristics and risk factors of community-onset *Clostridium difficile* infection (CO-CDI), an uncontrolled prospective study was performed. For 3 months in 2007-2008, three laboratories in The Netherlands tested all unformed stool samples submitted by general practitioners (GPs) for *C. difficile* by enzyme immunoassay for toxins A and B, irrespective of whether GPs specifically requested this. Patients with positive results were asked to complete a questionnaire. Positive stool samples were cultured for *C. difficile*, and isolates were characterized. In all, 2443 stool samples from 2423 patients were tested, and 37 patients (1.5%) with positive toxin test results were identified. Mixed infections were not found. Age varied from 1 to 92 years, and 18% were under the age of 20 years. Diarrhoea was typically frequent and watery, sometimes with admixture of blood or fever. Eight of 28 patients (29%) suffered recurrences. Among 31 patients with toxin-positive stool samples for whom information was available, 20 (65%) had not been admitted to a healthcare institution in the year before, 13 (42%) had not used antibiotics during the 6 months before, and eight (26%) had neither risk factor. A separate analysis for patients whose samples were both toxin-positive and culture-positive produced similar results. Cultured *C. difficile* isolates belonged to 13 different PCR ribotypes, and 24% of the isolates were non-typeable (rare or new) PCR ribotypes. In conclusion, CO-CDI can affect all age groups, and many patients do not have known risk factors. Several PCR ribotypes not encountered in hospital-associated outbreaks were found, suggesting the absence of a direct link between outbreaks and community-onset cases.

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