

## Letters to the Editor

### Fecal microbiota transplantation: is there a role in the eradication of carbapenem-resistant *Klebsiella pneumoniae* intestinal carriage?

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*Key words:* Fecal microbiota transplantation. *Clostridium difficile* infection. Carbapenem-resistant *Klebsiella pneumoniae*.

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Dear Editor,

The authors present the case of a 66-year-old woman with four hospitalizations due to recurrent *Clostridium difficile* infection (CDI) non responsive to vancomycin and fidaxomicin. Furthermore, intestinal colonization with carbapenem-resistant *Klebsiella pneumoniae* (CRKP) was identified after a positive stool culture in a screening routinely performed in our center in patients recently hospitalized. A fecal microbiota transplantation (FMT) using an upper gastrointestinal endoscopy was performed according to the department protocol (1), with instillation of 50 ml of liquid stool suspension of a donor into the duodenal lumen of the patient. Resolution of diarrhea occurred one day after FMT and the patient was discharged on the third day after the procedure. In subsequent follow-up appointments the patient remained asymptomatic and three screenings for CRKP with stool cultures performed 15, 45 and 100 days after FMT were persistently negative.

#### Discussion

In recent years, CRKP has become a major health problem with an increasing prevalence from less than 1% in 2000 to 8%

in 2007 of all *Klebsiella* isolates (2). CRKP can confer resistance to multiple different antimicrobial classes and the best treatment regimen of CRKP remains undefined (2,3). Moreover, CRKP infections are associated with frequent treatment failure and mortality rates of at least 50% (3,4). Intestinal carriage of CRKP has also been increasingly reported and it is estimated that 10% of these patients will develop infection (5). Therefore, intestinal decontamination of CRKP may prevent further infections and transmission. Previous reports on successful intestinal decontamination using a combination of colistin and amikacin have been described (5). FMT constitutes a highly effective, relatively inexpensive and apparently safe approach for refractory and recurrent CDI (1). Further studies concerning the effectiveness and applicability of FMT in intestinal decontamination of intestinal carriage CRKP are warranted to confirm the successful approach presented in this report.

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