# Trasplante fecal domiciliario en una mujer de la tercera edad

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# Resumen

La colitis recurrente por Clostridium difficile representa un reto terapéutico para los especialistas en el área de las enfermedades infecciosas. Se ha demostrado que un tercio de las recurrencias no responden adecuadamente al tratamiento antimicrobiano. Se han propuesto diversos mecanismos para explicar este fenómeno, entre los cuales podemos destacar la persistencia de esporas, la producción inadecuada de anticuerpos y la flora intestinal alterada. El tratamiento antibiótico recomendado actualmente para la colitis por C. difficile es metronidazol y/o vancomicina. El trasplante fecal ha demostrado ser una opción terapéutica efectiva para la infección recurrente. La administración de heces en el tracto digestivo se puede realizar mediante un procedimiento endoscópico o a través de sondas nasogástricas, duodenales o rectales.

Los pacientes mayores tienen una incidencia más elevada de infecciones recurrentes de C. difficile, y una peor supervivencia. Proponemos un método casero de trasplante fecal mediante la administración intrarrectal de materia fecal.

PALABRAS CLAVE: Trasplante fecal.

## **Abstract**

Recurrent clostridium difficile infection (CDI) is a challenge for infectious disease specialists. A third of first recurrences will fail antibiotic therapy¹. Several mechanisms have been proposed to explain this, such as persistence of spores, inadequate antibody response, and altered gut microbiota²-⁴. Standard recommendations for CDI treatment include metronidazole and vancomycin⁵. Fecal transplant has proven to be an effective therapy for recurrent CDI. Infusion of stools can be administered to the upper or lower gastrointestinal tract during an endoscopic procedure or using nasogastric/duodenal or rectal tubes⁶-ዓ. Elderly persons have an increased incidence of recurrent infection and have a higher mortality rate¹¹o.

We propose a home-based delivery method using a 5 ml syringe for intrarectal infusion of stools. (Gac Med Mex. 2014;150:106-7)

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A 91-year-old woman with a history of hypertension. She was prescribed by her physician a seven-day course of antibiotics (cephalothin) due to a respiratory tract infection. Two weeks later she developed diarrhea

(15-20 bowel movements per day). Initial work up included *clostridium difficile* A and B toxins, which came back positive and she was given metronidazole (500 mg three times daily). There was symptomatic improvement during the first days, but diarrhea recurred two weeks after completion of metronidazole. Once again *clostridium difficile* toxins were positive and the patient was started on oral vancomycin (250 mg every six hours).

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Fecha de recepción: 18-12-2013 Fecha de aceptación: 22-12-2013 A period of remission followed, but two weeks later she started having diarrhea again. She had a couple more recurrences, both treated with vancomycin, same dosage and in a pulsed regimen. Finally, her physician recommended a fecal transplant. She refused hospital admission and any form of invasive strategy including endoscopic procedures and the use of rectal or nasogastric tubes. An attempt to perform a fecal transplant at home was made. A family member was screened and met the criteria to become a donor, fresh stool was provided, it was mixed well and emulsified in 1,000 ml of sterile saline. The remaining solution was drawn up in 20 5 ml syringes and transrectally administered during a period of 10 minutes. An early positive response to therapy was seen and seven months later, the patient remains asymptomatic.

## Discussion

Fecal transplant is an effective alternative for the treatment of relapsing CDI. Several mechanisms for delivery of the stools have been described. There is no clear consensus regarding the optimal form of administration. We propose a new strategy that allows continuing medical care at home; this is especially useful

in the elderly that refuse any hospital-based therapy or invasive procedure. Home-made fecal transplantation could be a novel, inexpensive, and harmless therapeutic approach.

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