



**Service Priorities and Programmes**  
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**First fecal microbiota transplantation in clostridium difficile colitis in Hong Kong (2 case reports)**

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**Introduction**

Clostridium difficile (CD)colitis has increasing incidence in the world. An internal audit in Prince of Wales Hospital reviewed the mortality of CD colitis was up to 25% in 60 days. For refractory CD colitis, the relapsing rate can up to 40% despite optimal pharmacological therapy. A RCT for fecal microbiota transplantation (FMT) vs high dose vancomycin concluded that FMT has a cure rate up to 90% vs vancomycin group 40%. However, FMT has not been the standard of care for severe or refractory CD colitis in Hong Kong. We identified two patients, one with refractory and the other with severe CD colitis. FMT was commenced with very promising results.

**Objectives**

To test the feasibility and outcome of FMT in Hong Kong.

**Methodology**

Patient A was a 52 years old gentleman with refractory CD colitis presented with chronic diarrhoea for 1 year. Multiple courses of antibiotics was commenced but symptoms persisted. Repeated stools for CD toxin were positive. Patient B was a 76 years old gentleman with severe CD colitis presented with fever, abdominal pain and bloody diarrhoea. The signs and symptoms worsened despite prolonged course of intravenous metronidazole and oral vancomycin. Patients A's wife and patient B's son agreed to donate their stool for FMT as salvage therapy. Donor screening Clinical history and physical examinations for both donors were unremarkable. Blood tests for HbsAg, Anti-HCV, Anti-HIV and VDRL were negative. Stool tests for culture and sensitivity, viral isolation, clostridium difficile toxin, parasites, ova and cysts were negative. Patient preparation Single isolation room with contact precaution were provided to both patients. Feeding tube was inserted down to duodenum by under endoscopic and fluoroscopic guidance. Stool preparation The donors were admitted on the day of transplantation. The stool was saved and transferred to a blender and mixed with 500ml sterile water for 5 minutes. The supernatant was filtered by filter paper. The solution was collected in a sterile bag for infusion. Transplantation The microbiota solution was infused over 30 minutes via a feeding tube.

## **Result**

Patient A did not report any side effects during and after transplantation. The bowel opening decrease to 3 times per day after transplantation. Patient B reported nausea during transplantation. The signs and symptoms subsided the next day. Repeated stool for CD toxins were negative at 12 weeks for both patients. Conclusions: FMT is highly effective for refractory CD colitis. HA Hospital should introduce FMT in Hong Kong