Fecal Microbiota Transplantation (FMT) for Recurrent and Refractory Clostridium Difficile Infection (CDI): A Cohort study

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Introduction
Clostridium difficile infection (CDI) is a leading cause of hospital acquired gastrointestinal infection. It is associated with high morbidity and mortality and has a high burden on health-care system. Fecal microbiota transplant (FMT) is highly effective therapy for CDI in the western country but has not been investigated in local population.

Objectives
To investigate the efficacy and safety of FMT of patients with recurrent and refractory CDI in Hong Kong

Methodology
Patients with recurrent Clostridium difficile (3rd recurrence) or refractory (failed medical treatment with metronidazole and vancomycin) will be recruited for FMT. Fresh stool from healthy donors after stringent screening will be processed. The product was infused to the patients via nasoduodenal tube. Patients will be monitored for symptoms, blood tests and stool tests at week 2, week 4 and week 12 to assess relapse.

Result
8 patients were identified and recruited to during the study period from 1/6/2013 to 31/12/2015. 7 patients were male (87.5%). The mean (range) age was 75.8 (52 to 89) years. FMT was performed for recurrent CDI in 5 (62.5%) patients. 6 out of 8 patients were cured (cure rate 75%). There were 3 mortalities during the study period. 2 patients died of acute coronary syndrome at week 4 and week 9. One patient died of hospital acquired pseudomonas chest infection at week 4. All three events were considered unrelated with the FMT procedure. Conclusion: FMT is a safe and effective treatment option for recurrent and refractory Clostridium difficile infection.