

25 May 2016

## The power of poo in modern medicine.

A ground breaking study has shown that faeces transplantation (faecal microbiota transplantation /FMT) could play a role in diminishing the uncomfortable symptoms of inflammatory bowel disease (IBD) and could even become a more permanent cure for the condition.

Bankstown-Lidcombe Hospital and Liverpool Hospital have worked in conjunction with a team of researchers from the University of New South Wales and other hospitals to treat patients who have IBD with this unconventional method<sup>1</sup>. The results of this study, which are the biggest of its kind to date, were released this month for the first time at the European Crohn's and Colitis Organisation 2016 Congress.

Faeces was transplanted from seven screened healthy donors, and the healthy bacteria was inserted directly into the bowels of ill patients in order to cure their illness. Bankstown-Lidcombe Hospital gastroenterologist Dr Douglas Samuel, a senior investigator on the trial, said this FMT study shows it has the potential to drastically improve the quality of life for many people with IBD.

"IBD affects the inner lining of the colon. Conventional approaches to cure this condition using diet, probiotics, and antibiotics have been disappointing and using FMT as a treatment option, inserting healthy bacteria directly into the bowels of ill patients, is looking more promising," Dr Samuel said.

The eight week study showed that of the 81 participants, 44 percent given FMT experienced complete remission of symptoms; and 54 percent given FMT had significant improvement in their symptoms. Patients who did not receive the FMT were then offered the treatment for eight weeks and 46 percent of these participants experienced a complete remission of their symptoms.

"The FMT procedure is relatively simple, as the healthy faeces taken from the donor is blended with a saline solution and then strained; this end solution is then placed into the patient first via a colonoscopy and then via an enema at home for five days per week during the eight week trial," he said.

The Gastroenterological Society of Australia estimates that 33,000 Australians have IBD.

"Medication will help to control and prevent flare ups however for obvious reasons; a faecal transplant is often the last resort for those who are resistant to more standard treatments. It is an exciting result and more studies are needed." Dr Samuel said.

<sup>1</sup> Facilities involved: University of New South Wales, Bankstown-Lidcombe Hospital, St Vincent's Hospital, Melbourne and Sydney, Nambour General Hospital, Nambour, Liverpool Hospital and the Centre for Digestive Diseases.

<sup>1</sup> Researchers involved: Dr S. Paramsothy, Prof M. Kamm, Dr A. Walsh, Dr J. van den Bogaerde, Dr D. Samuel, Prof R. Leong, A/Prof S. Connor, Dr W. Ng, Dr R. Paramsothy, Dr N. Kaakoush, Prof H. Mitchell, W. Xuan, E. Lin, Prof T. Borody.