



## FMT induces clinical remission in ulcerative colitis

An intensive faecal microbiota transplantation (FMT) dosing regimen promotes clinical remission in patients with active ulcerative colitis, according to new research.

In the past few years, FMT has emerged as a highly effective treatment for *Clostridium difficile* infection. On the basis that IBD is also associated with alterations to the gut microbiota, and patients are often refractory to standard therapy, FMT has been investigated as a novel treatment in ulcerative colitis. Two previous randomized clinical trials have reported mixed results, with one study finding an increased remission rate in patients receiving FMT and one study finding no effect of the procedure. Amongst other factors, these studies differed by route of transplantation administration (enema or nasoduodenal) and number of infusions (six weekly infusions or two infusions 3 weeks apart). Importantly, different faecal donors seemed to be associated with different remission rates in recipients.

To address uncertainties in the role of FMT in ulcerative colitis, Sudarshan Paramsothy and colleagues performed a double-blind, randomized, placebo-controlled trial in patients with active ulcerative colitis. “The key features

distinguishing our trial from previous studies of faecal microbiota transplantation in ulcerative colitis were the intensity of treatment and the use of multiple donors for each faecal microbiota transplantation infusion,” write the authors.

Patients received five enemas per week for 8 weeks, with stool for every active transplantation enema obtained from multiple unrelated donors to increase microbial diversity. The composite primary outcome, steroid-free clinical remission and endoscopic remission or response at week 8, was met by 11 of 41 patients receiving FMT, compared with three of 40 patients assigned the placebo (risk ratio 3.6, 95% CI 1.1–11.9;  $P=0.021$ ). No difference in rates of adverse events was observed between the two groups, and FMT increased microbial diversity in recipients. “Our study shows that intensive-dosing multidonor faecal microbiota transplantation is a promising treatment in ulcerative colitis,” the authors conclude.

Hugh Thomas

**ORIGINAL ARTICLE** Paramsothy, S. et al. Multidonor intensive faecal microbiota transplantation for active ulcerative colitis: a randomised placebo-controlled trial. *Lancet* [http://dx.doi.org/10.1016/S0140-6736\(17\)30182-4](http://dx.doi.org/10.1016/S0140-6736(17)30182-4) (2017)