Fecal transplants could ease IBS symptoms – if they come from a 'SUPER DONOR'.

Nearly half of the patients in the study reported significant improvement in their symptoms after receiving a fecal transplant.

By Linda Carroll

Fecal transplants may ease the painful and distressing symptoms of irritable bowel syndrome — if those transplants come from people dubbed “super donors,” according to a study presented Sunday.

The large, randomized double-blind placebo controlled trial — considered the gold standard for medical research — found that fecal microbiota transplantation significantly improved IBS symptoms in nearly half of patients. The study was presented by lead researcher Magdy El-Salhy, a professor in the department of clinical medicine at the University of Bergen in Norway, at the annual United European Gastroenterology Week in Spain.

An estimated 10 to 15 percent of Americans have IBS, according to the American College of Gastroenterology. Symptoms can include abdominal cramping and bloating as well as constipation and diarrhea. Although the condition can cause significant pain and discomfort, it doesn’t result in damage to the intestines.

The cause of IBS is unknown, but some researchers have suggested that it might be linked to abnormalities in the microbiome, the plethora of microorganisms that populate the gut.

Fecal transplants, or fecal microbiota transplantation (FMT), work by repopulating the gut with a healthier array of microorganisms. Stool from a donor is processed and then transplanted into the gut of the recipient.
To explore whether FMT could calm IBS symptoms, El-Salhy and his colleagues recruited 164 patients who had been diagnosed with the condition and who experienced moderate to severe symptoms.

Before treatment the patients were asked in detail about their symptoms. They were then randomly assigned to receive 30 grams of a solution containing their own feces — the placebo — or one of two doses (30g or 60g) containing feces from a so-called super donor. The doses were delivered to the small intestine through a tube inserted into the mouth and down the throat.

Three months later, the patients were again asked to detail their symptoms. Compared to before treatment, 23.6 percent of patients in the placebo group reported moderate symptom improvement. In the group that received the lower dose of super donor feces, 76.9 reported a moderate response, and in the higher dose group, 89.1 percent.

More important, they also found symptom remission — meaning that symptoms went away entirely — in 35.2 percent of those in the lower dose group, and in 47.3 percent of those in the higher dose group. That’s compared to 5.5 percent of the patients in the placebo group who reported symptom remission.

One year later, El-Salhy said that the effects appear to have lasted. “The preliminary results [suggest] most, 90 to 95 percent, of the responded patients are still well and about 50 percent are still ‘cured,’” he wrote in an email.

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Previous studies have also looked at the effects of FMT on IBS symptoms, and have found mixed results. El-Salhy credited the effectiveness of the treatment given in his study to the super donor’s specific microbiota.
“We had a carefully selected donor from several candidates who had traits known to affect intestinal microbiota positively,” El-Salhy said. Overall, the donor was healthy, had been breast fed, consumed a nutritious diet, took no regular medications, was a nonsmoker and had taken antibiotics only a few times, he said.

Experts were heartened by the results, but somewhat skeptical about the idea of a super donor, since it wasn’t clear how El-Salhy’s results could be duplicated.

“These are very promising results that will certainly generate a lot of interest and attention because there is a great interest in these kinds of therapeutics for IBS,” said Dr. Alexander Khoruts, a professor of medicine and medical director of the Microbiota Therapeutics Program at the University of Minnesota. “But it’s not clear how you could find another ‘super donor’ to reproduce these results.”

Dr. Jonathan Jacobs, an assistant professor of medicine at the University of California, Los Angeles Medical School and director of the UCLA Microbiome Core, agreed. If it turns out that these kinds of results are possible only with stool from a super donor, who could be a rarity, “then we wouldn’t be any better off,” he said.

Given the mixed results in previous studies treating IBS with FMT, “I’m not sure this study will allow us to conclude that a super donor is needed, but rather that FMT in general needs to be validated in additional studies,” said Dr. Purna Kashyap, an associate professor of medicine, physiology and biomedical engineering and co-director of the Microbiome Program at the Mayo Clinic.

Indeed, it’s still unclear what role gut bacteria play in IBS, and in fact, the majority of studies show that the microbiome of people with IBS is similar to that of healthy people, Kashyap wrote in an email. With that in mind, “how do you decide what a good donor should be?” Kashyap added.