

## **Don't poo-poo technique: Fecal transplant can cure superbug, doctors say:**

**(More than 90 per cent of C. difficile patients are cured by fecal transplants, studies suggest)**

A controversial new treatment, which involves the transplantation of human waste, can treat cases of C. difficile infection. But only a handful of physicians in Canada undertake the messy procedure. *Clostridium difficile* is a superbug that commonly spreads in hospital settings and has been linked to the deaths of at least 2,000 people in Quebec since 2003, as well as in other provinces. Though C. difficile can be kept in check by good bacteria in the bowel, problems can arise when the superbug is treated by antibiotics such as vancomycin. The antibiotics sometimes wipe out the good bacteria but fail to completely kill the C. difficile — leaving enough of it that it later flourishes. "If you wipe out the normal bacteria by taking an antibiotic, then this bug overgrows and it releases a toxin which causes severe diarrhea," Dr. Mike Silverman, an internal medicine specialist from Ajax, Ont., told CBC News. According to him, the diarrhea can become chronic day after day and month after month. "It's painful, people can't get on with their lives ... and if doctors can't keep a patient hydrated and nourished, it can be deadly." Calgary resident Dorothy Badry battled C. difficile for almost a year in 2004. "You are going to the bathroom at least 40 times a day. And there is a lot of pain associated with that. Your skin starts to break down and the process is extremely painful." During that time, Badry could not work and could not care for her disabled daughter. "I basically had to give up everything," she said.

### **Calgary doctor is one of few doing transplants:**

Fecal transplants have become the first-line treatment for chronic recurrent C. difficile in Scandinavia. As well, more and more doctors are using it in the United States. Studies that have been published show that more than 90 per cent of patients are cured through fecal transplants — most of them after just one treatment. But only a handful of doctors in Canada are willing to undertake the unpleasant procedure which involves taking a healthy person's fecal matter and transplanting it into a person infected with C. difficile. They cite sanitation reasons for their hesitation. Calgary physician Dr. Tom Louie, head of infection control at Foothills Hospital, is one of the few physicians in Canada who treats patients with chronic C. difficile with fecal transplants, or fecal therapy. He has done 38 procedures to date. The procedure involves getting a close relative of the patient, such as a sibling, to donate several days-worth of stool. Louie tests the stool for diseases such as hepatitis and HIV and then mixes it with saline to create liquid feces. He then administers the stool to the patient through an enema. Louie said the technique allows good bacteria from the transplanted stool to reduce the number of C. difficile bacteria in the intestines and to restore normal intestinal function. He said the process is fairly quick. "It takes me about an hour and I leave it in there overnight. I'm hoping that some of these normal bugs will come and find a home, and when they find a home it will kick out the C. difficile."

### **'It cured me,' Toronto woman says:**

Marcia Munro, a Toronto resident, received a fecal transplant from her sister Wendy Sinukoff after suffering from C. difficile for 14 months several years ago. **'This procedure cured me.... I know many people die from C. difficile and I want people to know there is hope when you have this illness.'**—*Marcia Munro*

"I had to collect stool samples for five days prior to our leaving Toronto, and I collected it in an ice cream container and kept it in the fridge," said Sinukoff. She had to then fly the samples to Calgary so that Louie could transplant it into her sister — a process that involved getting the sample through airport security. "My biggest fear was that my samples were not allowed to be frozen, so I had to take them as carry-on luggage in the airplane and I was terrified that I was going to be asked to have my luggage searched," she said. Munro said the transplant was a success.

"It cured me. This procedure cured me and one of reasons I agreed to do this story — because it's difficult to talk about — is I know many people die from C. difficile and I want people to know there is hope when you have this illness."