

FINANCIAL REVIEW

Can antibiotics heal inflammatory bowel disease? This Sydney banker lives with controlled Crohn's disease

After enduring the ravages of inflammatory bowel disease, a Sydney banker has found a path to wellbeing.

by **Jill Margo**



Richard Chesworth lives with controlled Crohn's disease. He has his life back and can go years without a symptom Louie Douvis

Back in February 2015, Richard Chesworth found himself sitting in a Qantas lounge, his eyes welling with tears. He wasn't distressed because he'd been awake since 4am or because his flight had been delayed.

Rather he was remembering that on the same day 20 years earlier, he'd had a traumatic health episode at work and, for the first time had met the doctor who would change the course of his life.

Chesworth opened his phone and composed a heartfelt anniversary message to Dr Tom Borody. "You can't control the cards you are dealt in life but you can control what you do with them and you have helped me to achieve the life I now have," he wrote.

When Chesworth was 25, he'd left Canberra for a banking job in Sydney. Despite living with constant coughs and colds, and having unexpectedly shed a great amount of weight, he felt bulletproof.

No alarm bells rang for him when, after having his wisdom teeth removed, he needed to be restitched three times. He was not absorbing vitamin K so his blood took a long time to clot.

By February 1995, he was still relatively new to the job when he arrived at work one day, feeling fine. At morning tea he had a chocolate muffin and immediately

cramped up. A little later, sharp abdominal pain sent him rushing for the men's room.

Haemorrhage

As he sat down, blood began falling out of him. He later learned that in those few moments, he'd haemorrhaged 1.6 litres of blood from his colon.

"I walked out of the bathroom with my shirt soaked in sweat and asked my boss for a cab charge. I just wanted to go home," he said.

"From home I rang my sister-in-law and told her I needed a doctor urgently." She sent him to her general practitioner nearby who immediately suggested he see a gastroenterologist (Tom Borody) who was just around the corner.

It was a serendipitous direction because Borody is well known for his innovative work with inflammatory bowel disease (IBD).

After two days' investigation, Chesworth was diagnosed with one of the two common forms of IBD. The first is ulcerative colitis which affects the inner lining of the colon. He had the second type, Crohn's disease, which extends through the lining into the entire thickness of the bowel wall.

Where most of his bowel wall was 2.8mm thick, inflammation had swollen the wall of a long segment to a thickness of 11mm.

Typical symptoms are abdominal pain, diarrhoea, rectal bleeding, loss of appetite, fever and weight loss. He had them all.

He also learned that the so called "haemorrhoids" he had been diagnosed with were actually peri-anal fissures, a common complication of Crohn's.

Another complication is a recurring bowel obstruction which can result in pain and poor absorption of nutrients.

Yet another is the development of little tracts or fistulae between loops of the bowel and other structures in the pelvis which can make life very uncomfortable.

Out of the blue

The diagnosis came out of the blue and was very distressing. Chesworth had no family history of the disease and he was not a smoker, which is thought to be a risk factor.

The prevailing orthodoxy is that in those with a genetic predisposition, Crohn's is caused by an aberrant reaction of the bowel immune system to normal bacterial flora that reside in the gut.

As there is no cure, he understood what the diagnosis could mean for the rest of his life.

Over the next few years, under Borody's guidance, he tried the conventional anti-inflammatory therapies. Crohn's can be intermittent with periods of aggravation and periods of remission.

During a flare-up, Chesworth says the lethargy was overwhelming. It could take him 45 minutes to get out of bed. Shaving, dressing and getting to work was like climbing a mountain.

When his anti-inflammatories were no longer effective and he couldn't take others because of an allergy, he moved onto immune-suppressive agents and took the corticosteroid, prednisone.

But eventually its side-effects became unmanageable. "I'd have spikes of energy and become a raging bull and then, suddenly I would feel as though I'd been spear-tackled and fall over."

With his mood swings out of control, with always having to be close to a bathroom and with having to be vigilant about what he ate – a cheese pizza could give him a hangover – he needed another form of treatment.

When the remaining available protocols failed, doctor and patient hit a brick wall.

Search for treatment

Although it is not a cure, it is not uncommon for people with severe Crohn's to land up having surgery to remove the inflamed part of the colon.

They didn't want that and Borody suggested they try antibiotics. A new view was forming that rather than treat the inflammation, antibiotics should be used to try and treat the infectious agents that may be causing the inflammation.

Borody, founder and medical director of The Centre for Digestive Diseases, had been the first in the world to develop, publish and use triple antibiotic therapy to eradicate *Helicobacter pylori*, the bug that can cause stomach ulcers and gastric cancer

Now he wanted to target a specific bug called *Mycobacterium avium* paratuberculosis or MAP, which is widely present in milk, water and other food. MAP had been proved to be a causative pathogen in Crohn's and a London specialist had already used a combination of two antibiotics and achieved a marked reduction inflammation in people with severe disease.

That their symptoms improved suggested that if the underlying mechanism was treated, anti-inflammatory drugs were not needed.

Borody, an adjunct professor of Science at UTS in Sydney, improved the Anti-MAP treatment by using three antibiotics and achieved some dramatic reversals of inflammation.

Some patients achieved long-term remission suggesting the condition may be healed by antibiotics alone.

High remission rates

But as with all infective agents, Borody says MAP is not a single bacterium but has many subspecies and some patients respond better than others.

An Australia-wide trial targeting MAP showed a significantly high remission rates but the maintenance therapy was dogged with methodological flaws and the results cannot be used.

When Borody gave Chesworth triple therapy to target MAP, rapid remission took place.

"My symptoms disappeared. I know some people say Tom is a cowboy but I will back him every day. I'm living with controlled Crohn's."

Chesworth is on a maintenance regime which requires a colonoscopy every three years. If a bit of ulceration is found, he goes back on active treatment until it clears. His longest ulceration free period is six years off Anti-MAP.

He reckons that over the past 21 years, he's not taken medication for almost half of them. These days, as an associate director in a prominent banking institution he is married with two children.

"I live an unrestricted life. There are times when I travel intensely and find myself in a hotel room late at night, eating Pringles."

Some weekends he takes a peaceful, solo, 50 kilometre bike ride. "I see this as a reflection of my wellbeing."

It's difficult to estimate how many Australians suffer from Crohn's as patients with ulcerative colitis can go on to develop it. Borody estimates the number at between 50,000 and 70,000.

Until early this century, it had no known cause.

Now, he believes 80 per cent of people will go into remission within six months when treated initially with Anti-MAP therapy.

Hence in those with "virgin" Crohn's – who have had no other treatment – Anti-MAP could put them into rapid remission.

Close to a cure

"We've come very close to a cure in six people. By cure we mean they have lived more than five years without any therapy or signs of Crohn's clinically or on biopsy. But the jury is still out," he says.

Borody has taken much professional flak over his career. When he started doing faecal transplants, some of colleagues suggested he was mentally ill. Transplants are now a mainstream treatment for an intractable form of diarrhoea.

When he developed the triple therapy for H. pylori, there was widespread scepticism too. It's now standard practice.

"I'm either perceived as innovator or a cowboy but I have been getting more respect in the last few years," Borody says.

A research study investigating a combination antibiotic is now underway for people suffering from Crohn's disease, see Mapmycrohns.com