

Naturopathic treatment for bowel incontinence in a patient with multiple sclerosis: A case study

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Abstract

Multiple sclerosis (MS) and faecal incontinence are debilitating conditions, both physically and emotionally. This case study explores the use of herbal medicine within a naturopathic framework in the assessment and treatment of two complex health conditions.

Keywords: Multiple sclerosis, faecal incontinence, case study, herbal medicine, complementary medicine

Introduction: bowel incontinence in a multiple sclerosis patient.

Healthy bowel function is described as 1-2 regular bowel motions a day.¹

The ability to hold on for a short time after feeling the urge to go to the toilet without accidental loss of faeces indicates healthy bowel control and passing an easy motion within a minute of sitting on the toilet, ideally without straining, pain or discomfort indicates good digestion.² There should also be complete emptying of the bowel at this time.¹

Faecal incontinence is a result of poor bowel control and includes symptoms of inadvertent passage of stool, soiling, or excessive escape of flatus.³ Reduced bowel control is often caused or made worse by medication or underlying health conditions.³

Known aetiologies for faecal incontinence include long term straining, a side effect of some medications such as antacids prescribed for acid reflux and those prescribed for diabetes (metformin)⁴ and Glienya for multiple sclerosis (MS), weak pelvic floor and rectal muscles as a result of having babies, surgery, radiation therapy or age.⁵ It can also be a secondary issue arising from a diagnosis of diabetes, nerve damage from MS or Parkinson's disease⁶ or a specific bowel condition such as coeliac or inflammatory bowel disease (IBD).⁷ Although not common, inflammatory bowel disease may be a cause of malabsorption in MS patients.⁸ Studies have found that those with clinically diagnosed IBD have a higher incidence of demyelinating diseases than non IBD controls. Therefore, diet and digestive health must always be considered when assessing MS clients.⁸ Generalised diarrhoea, without incontinence, can also develop as a result of stress, infection, food intolerances or medications.⁹

Emotionally, faecal incontinence can dramatically disrupt the lives of those who suffer with it. Inability to control flatus or stool can produce embarrassment,

leading to fear and anxiety that may limit a person's social and every-day activity.¹⁰ Thus, quality of life must be considered for those with faecal incontinence.⁷

Presenting complaint

'Kate', a 44 year retail assistant, presented with diarrhoea and urgency with frequent loss of bowel control about 1-2 hours after waking. Each morning she would wake with a sensation that she needed to use her bowels, but on going to the toilet found there was no urge. Within 1-2 hours of waking she would have cramping with urgency that required her to make it to a toilet within 30 seconds.

In 2009, after what Kate described as a stressful time, she began to notice her bowels becoming looser and the diarrhoea and urgency progressed from here. At this time, she had moved from Scotland to Australia, was newly married and recently given birth to her first child. A year later she was diagnosed with MS. Her first experience of faecal incontinence was just 18 months ago and left her feeling 'mortified'.

The initial episode of faecal incontinence was before Kate started her MS medication, but the incontinence and urgency had definitely increased in severity and frequency since being prescribed fingolimod/FTY720 (Gilenya, Novartis) for MS.

Her morning routine was hectic and busy as she had 2 children to get ready for school and then a 30-minute drive to work. The urgency nearly always started 10 minutes into her drive to work and lead to her needing to pull over on the side of the road. On a number of occasions she had an accident and, for the last 18 months, always made sure she had a plastic bag and a change of clothes in the car as up to once a fortnight she would not make it to work or a toilet in time. She would need to defecate in the bag on the side of the road at least once a week.

Aside from the urgency in the morning, her stools were generally very soft (type 5-6 on the Bristol chart and very smelly). Kate said that she would use her bowels 2-3x a

day and the smell was fermented. The urgency was not significant later in the day.

Kate explained that she did not notice any bleeding, mucous or other anomalies in her stools, was not bloated, nor had any faecal leakage or loss of control of her bowels during exercise. There were no upper digestive issues such as reflux or indigestion to report. Kate did experience lower abdominal cramping and spasm in the mornings, which often got her out of bed. During the premenstrual period, she experienced an increase in bowel symptoms, cramping and bowel incontinence.

She was feeling quite exhausted and mentally 'fed up' with her symptoms and mentioned that coming to see me was her last resort. MS had not been ruled out as a cause, but her specialist said that it was unlikely, given that her MS had not progressed (bowel incontinence as a result of MS usually only occurs in advanced stages of the disease).⁹ As such Kate had no explanation or treatment plan and was feeling angry and 'let down'.

Kate had done a lot of research around MS and since her diagnosis had adopted a low allergy diet (which she stuck to 90% of the time). She was for the most part dairy and wheat free, minimised sugar and caffeine and ate a wide range of fruit, vegetables, proteins and wholegrains. She was physically fit and enjoyed walking and going to the gym regularly as much for exercise as emotional wellbeing.

Medical history

Kate had a past history of recurrent childhood tonsillitis, teenage glandular fever and a current diagnosis of MS.

She had recently finished off some antibiotics for an upper respiratory tract infection, and had many courses of antibiotics for childhood tonsillitis, prior to tonsillectomy. Kate had low iron and menorrhagia, which was not yet addressed.

Her medications included: Gilenya (MS) along with natural medicines of vitamin D, fish oil, multi-B complex (self-prescribed, poor quality supplements with very low therapeutic doses).

Medical Pathologies and investigations

Kate had seen her general practitioner (GP) and neurologist regarding her incontinence. In the past 12 months she had various blood tests and a colonoscopy, which were all found to be normal, with no abnormalities detected. Additionally, a recent PCR stool test was negative for both parasites and bacteria. She had been tested for coeliac disease and this was also ruled out. As such her GP had said he was unable to help her. Her neurologist had said that the medication could cause loose bowels, but he was not willing to take her off the medication for MS.

Kate's blood tests indicated low vitamin D (50), low B12 (120 pmol/L), low globulin (20g/L), low ferritin

(14), and low lymphocytes (0.8/L).

Her MS had been diagnosed in 2009 and had not progressed; for this she was under the care of a neurologist.

Family and social history

Kate's maternal grandmother developed MS at age 40. Her mother and siblings had an unremarkable history and her father was on blood pressure medication but was otherwise to her knowledge healthy. She did not know her paternal grandparents as they had both died from an accident when her father was young.

Observation and physical examination

Kate's diet was already focused on wholefoods, quality protein and fresh produce and minimal grains, and she was an active and physically fit woman with a healthy body mass index (BMI) and waist circumference. Her blood pressure was also healthy (120/75). Sue described herself as a 'workaholic and a 'go getter', someone who was always rushing and busy.

Diagnosis

Pathology testing had demonstrated that bacterial or protozoal infections were unlikely to be present. However, frequent use of antibiotics may have disrupted bowel flora⁸ and thus dysbiosis was a possibility. I assessed Kate for dysbiosis using urinary indicans testing (Health World LTD). Dysbiosis was evident from this test.

Her low nutritional levels of vitamin B12, iron and vitamin D were significant in the management of the MS,⁹ but less so in regard to her incontinence. Her dietary intake included red meat 3 times a week and a regular high intake of leafy greens, fruit and vegetables, which may have meant a sufficient intake of iron and B12; however, Kate has a higher demand for these nutrients due to the levels of inflammation associated with MS⁹ and a possible reduction of B12 absorption in the small intestine, which can occur with diarrhoea and dysbiosis.⁹

Both Kate's general practitioner and neurologist had mentioned to her that diarrhoea and faecal incontinence could be a side effect of her MS medication (Gilenya), though case evaluation determined that the initiating episodes of poor bowel control were prior to drug commencement. It was highly possible that the incontinence was a progression of her MS; however, at this stage her neurologist did not think the incontinence was related to the MS. Kate acknowledged that stress was a contributing factor to the incontinence and her current lifestyle continued to create stress.

Treatment priorities

Digestive health was identified as the initial priority. If in 2 months there was no evidence of improvement, Kate would be referred for further investigations. Kate was happy with this as she and her neurologist felt

that all relevant medical testing had been completed. I reiterated that her symptoms may be due to progression of her MS; however, it appeared that there might be some non-MS related issues that may be contributing to her bowel urgency.

I noted that her current nutritional medicines were poor quality and that at some point would need to be changed to improve absorption and her immune/ nervous system health. As such, we began with a dysbiosis treatment plan.

Diet

Kate's diet was already healthy and varied. I suggested a few changes such as avoiding yeast and sugar whilst undergoing dysbiosis treatment, as these foods can reduce resistance to yeast infections and poor quality intestinal bacteria.⁸ Kate was also asked to introduce green tea and lemon water to improve digestive secretions and increase antioxidants in her diet.

As MS is an autoimmune condition affecting the nervous system, dietary prescriptions for MS include excluding foods that are known bowel, bladder and immune irritants such as caffeine and sugar,⁴ avoiding known food intolerances¹² with a tendency to eliminate dairy and gluten,¹² as well as including a wide range of healthy oils, antioxidant rich whole foods⁹ and whole grains that are naturally gluten free. These in theory would also support good digestive health.

Treatment:

Table 1: Breakdown of herbal formula — Parex (Health World LTD)

Herb	Amount
<i>Juglans nigra</i>	500mg
<i>Artemisia annua</i>	400mg
<i>Berberis vulgaris</i>	400mg
<i>Zingiber officinalis</i>	250mg
<i>Gentiana lutea</i>	200mg
<i>Origanum vulgare</i> (oil)	2mg
<i>Cinnamon zeylanicum</i> (oil)	2mg
<i>Thymus vulgaris</i> (oil)	2mg

Probiotic Ultra flora LGG (*Lactobacillus rhamnosus* 10 billion)
(Health World LTD)

Treatment Rational

Faecal incontinence can be caused by changes to bowel flora as a result of stress, antibiotics, food sensitivities and immune dysfunction. As Kate had a history of all of these factors, working on the quality of bowel bacteria was an important place to begin. The initial treatment included herbal antimicrobials combined with a probiotic strain that is known to improve diarrhoea in those with food intolerances and allergies.⁹

Whilst Kate's PCR test results showed no significant bacterial or parasitic infection, urinary indicans testing found dysbiosis to be an issue, possibly due to her past history of antibiotic use, stress and past diet. Research suggests that many patients have improved digestive symptoms with the administration of probiotics.¹² Intake of adequate probiotic foods and fibre is also helpful (Kate's diet was already full of these).

Follow up (3 weeks)

Kate had been very compliant with both remedies and diet but had not noticed any changes to the urgency. There had been one accident in the car on the way to work and the day she saw me had PMS with cramping and extra bouts of diarrhoea. She had heavy bleeding for 2 days with cramps in her lower abdomen and legs. This was common for Kate and no better or worse than any other month.

At this point I had reviewed her case and was interested to note that Kate would always wake with bowel urgency, resulting in an incomplete bowel motion. However, the moment she was in the car, relaxed and just sitting driving, her bowels would open. I questioned her further about her morning routine, which she said was very hectic and she often felt that she had little time to 'use the bathroom' before she left for work. We decided to adapt her morning routine and 'timing' to reduce the chance of accidents.

Treatment

Kate was to finish what was left of the LGG and Parex and start on a herbal mix, CPMP and Intestamine (Bioceuticals).

Table 2: Herbal Prescription

Herb	Amount
<i>Viburnum opulus</i>	20ml
<i>Geranium maculatum</i>	20ml
<i>Dioscorea vilosa</i>	20ml
<i>Matricaria recutita</i>	20ml
<i>Valeriana officinalis</i>	20ml
	100ml Take 5 drops TDS increasing to 5ml TDS

Treatment rational

Stress is a major contributor to diarrhoea, with 95% of the body's serotonin receptors being found in the digestive tract.¹³ As such stress and mood changes can directly impact on bowel health.¹³

As stress was a large part of Kate's history, in combination with spasmodic menstrual pain and bowel urgency, I felt it was important to utilise antispasmodic herbs and nervine tonics.

Table 3: Breakdown of herbal and nutritional powder - Intestamine (Bioceuticals)

Herb/nutrient	Amount
<i>Pistacia lentiscus</i>	11g
<i>Curcuma longa</i>	1.5g
<i>Aloe vera</i>	500mg
<i>Ulmus rubra</i>	500mg
Glutamine	2g
Citrus bioflavonoids	200mg
Pectin (apple)	100mg
Take 1 tsp BD with meals.	

CPMP tissue salt – chew 2 tablets TDS.

According to Hechtman (2012)⁹ the following classes of herbal medicines are indicated in spasmodic diarrhoea.

Anti-diarrhoeal herbs were used to decrease the volume and improve the consistency of the stool; examples include *Ulmus fulva* and *Geranium macculatum*.

Spasmolytic herbs were utilised to reduce spasm in the GIT, which can result in urgency and increased frequency of bowel motions. Antispasmodics, such as *Dioscorea villosa*, were used traditionally by the eclectics for disorders of spasm and weakness such as MS.⁹ Other spasmolytic herbs include *Viburnum opulus*, *Dioscorea villosa* and *Matricaria recutita*.

Carminatives relax the sphincters in the GIT to reduce spasm and gas, which can reduce urgency and episodes of loose stools. The carminative chosen in this case was *Matricaria recutita*.

Nervine tonics are useful to reduce stress which may contribute further to a reduction in bowel symptoms. *Matricaria recutita* and *Valeriana officinalis* are indicated in this category.

Anti-inflammatory herbs such as *Matricaria recutita*, *Aloe vera* and *Curcuma longa* can soothe and reduce bowel inflammation. *Curcuma longa* is particularly well indicated as it has high anti-inflammatory and antioxidant properties with an ability to stimulate neurogenesis.¹³ As both MS and stress are potential causes of inflammation in the body, it was hoped that these herbs might provide some relief.

Diet: continue as previous.

Lifestyle: ‘timing’ was important. Kate was to sit on the toilet on waking or as soon as she felt the urge to use her bowels and to take on the correct position (elbows on knees, lean forward and support feet with a footstool). The aim was to fully relax her pelvic floor and sphincter muscles and to use some deep breathing techniques, which we practised in the consultation. I was hoping this would allow her to use her bowels before leaving for work, thus reducing the chance of accidents and making her less anxious.

Follow up 6 weeks (with 2 email reports between)

Kate was going on holidays and had booked into a continence nurse on her return. I asked for an email report so we could adjust herb doses as required.

At 6 weeks when Kate came back she had noticed a number of improvements.

After introducing the current regime, Kate had not had loose bowels for 1 month and there were no accidents during this time. Though not perfect, her stools were formed at beginning and type 5 (Bristol Stool Chart) at the end. Her wind and stomach gurgles had slowly settled.

After starting the Intestamine, Kate had 1 day with no bowel movement at all. This had worried her, as in the past if she ever skipped a day, it would be followed with a day or two of very watery motions. This, to her surprise, had not happened and her bowels improved with Kate experiencing no urgency or accidents.

Her period had finished the week prior to the appointment and she described it as the ‘best period ever’. There had been a slight aggravation to her bowels, but as she increased the dose of the herbs to 5ml TDS, there had been no incontinence, only slight bloating.

Treatment

Lifestyle: continue with toilet plan and learn to manage her stress (a meditation prescription was suggested with a downloaded app to use daily).

Diet: continue with current plan.

Remedies: At this point I gave Kate a repeat of the last herb mix and more CPMP with a repeat script. She was to reduce the Intestamine, using it every second day to finish. We would review her case again in about 2 months, unless her symptoms worsened.

Ongoing treatment

At this point Kate continues to be going well and is gaining confidence around car trips and her continence. She has emailed to say that her son had gastroenteritis and at this time her bowels went back to being very loose; however, this resolved within 2 days, which is very fast for her.

Kate has acknowledge that she is a ‘goer’ and that she wants to cut back on work to 4 days a week and spend more time with her growing children.

Eventually I would like to address her nutritional deficiencies and work towards reducing the progression of the MS. For now, however, Kate is very happy as she is worrying less and less about her bowels. A follow up email 3 months later, said that she was still taking the herbs and CPMP and had not had any more accidents. She would consider coming back to work on the MS but felt like her diet was taking care of it at the moment.

Discussion

When working within a naturopathic paradigm it is important not to overlook the obvious in the face of a serious chronic health condition. The importance of taking a thorough case history to identify simple lifestyle habits that may be contributing to the symptoms can reveal a great deal and simple changes can lead to a positive clinical impact for the patient. The holistic nature of naturopathic medicine, slow small changes to diet and lifestyle in combination with gentle herbal medicines have made a huge difference to Kate's quality of life, whilst living with a serious degenerative condition such as MS.

Initially, I felt overwhelmed by this case and considered options for referring Kate almost straight away. However, when I reviewed the case and took the MS out of it, I realised I had worked with many women with chronic bowel problems with success in the past. I had a conversation with Kate about this and she was happy to work together – she was not asking me to 'fix her MS', just improve her bowel function. We agreed that if no changes were evident after 2 months, I would refer her on. Once this pressure 'that I was her last resort' was off my shoulders I was able to think about the case in a more holistic and naturopathic perspective, taking her past history, pathology results and clinical history into account. From here I generated the antispasmodic and anxiolytic herb mix that fitted her picture. Stress management techniques and morning bowel re-education processes were key elements in this case.

Kate was nervous to take the tincture as it contained alcohol, so we started with drop doses with the aim to increase to 5ml TDS after 7 days if there was no change. While we did eventually get to a therapeutic dose of 5ml BD, the herbs began to work even at drop doses. It was interesting to me that a long standing condition could respond to such straightforward and gentle treatment.

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