

The Efficacy of Individualised Homeopathic Treatment on Constipation

Nakhooda, F., Solomon, E. M. and Tsele-Tebakang, T.

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ABSTRACT

Background: Constipation is the term describing either infrequent bowel movements, difficult evacuation of stool, hard stool or a sensation of incomplete defecation (Longmore, 2012). The effects of constipation compound from impacting on the person's physical health to effecting their moods and influencing their social life (Marks, 2012). Most conventional treatments strive to treat only local symptoms and do not address concomitant symptoms of constipation. Alternative treatment options such as homeopathy offer a more holistic approach and can be adopted; however, further research is needed to establish its effectiveness in treating constipation.

Purpose: The aim of this study was to determine the efficacy of individualised homeopathic treatment on chronic constipation in adults.

Methodology: This was a case study research design conducted at the University of Johannesburg Homeopathy Health Training Centre. Thirteen adults between the ages of 18 to 50 years who met the Rome II criteria for constipation were selected for participation and ten participants completed the study. The study consisted of four consultations per participant over a six week period. At the initial meeting a comprehensive case history was taken and analysed according to the principles of classical homeopathic prescribing and the best suited homeopathic remedy was administered. Data collection was in the form of case studies, which were analysed and described. The Bowel Function Diary and Bristol Stool Form Scale were used to assess changes in defecation quality and frequency and the results of these were then represented in the form of graphs.

Results: The results of the case studies were positive and holistic. They indicated an improvement in stool frequency for all ten participants, and an improvement in stool form and ease of evacuation for the majority of the participants. The participants also reported that they experienced a better state of general and emotional wellbeing during the course of the research study. These results support previous findings which suggest that when an individualised homeopathic approach is correctly applied in a clinical setting, it is an effective approach for the management of chronic constipation in adults.

INTRODUCTION

Constipation is a loose term often used to describe a multitude of symptoms of gastro-intestinal disturbances, with laxatives being the most popular choice of intervention. The Rome II criteria is the current standard used to define and determine the presence of constipation. To meet this criterion a person must have experienced two of the following for at least three months: a bowel evacuation of three or less times per week, symptoms of straining, hardened stool, or incomplete bowel evacuation for at least 25% of the time (Longmore, 2012). Current patient satisfaction levels with the standard available treatment strategies are only partially favourable (Johansen and Kralstein, 2007). A survey conducted by Johnson and Kralstein (2007) on chronic constipation sufferers indicates that around 47% of participants were dissatisfied with their current constipation treatment; 50% felt that fibre intake did not relieve their constipation, 44% felt that over-the-counter laxatives did not relieve their constipation and 50% felt that prescription laxatives did not relieve their constipation. Approximately half the group felt that their constipation treatment did not relieve the multiple symptoms of constipation and were generally disappointed in the ability of current constipation treatments to improve their quality of life (Johansen and Kralstein, 2007).

Tabbers (2011) highlights the lack of research studies in assessing the efficacy of non-pharmacological therapies in the treatment of constipation. According to Diamond (2005), the digestive system is intricately related to the rest of the body's optimal functioning as well as to the individuals' emotional arena, which necessitates a more holistic approach in the treatment strategy to encompass all aspects of the individual's presentation of the condition. Homeopathy, which uses a holistic approach in its therapeutic practice, potentially offers such an alternative to current conventional treatments. Individualised homeopathic prescriptions are based on the patients' local symptoms, other physical symptoms, their general state of wellbeing and their mental-emotional frame of mind. Potency, dosage and frequency of the prescriptions are also tailored to the individual. Homeopathic remedies have no drug interactions, side effects or contra-indications and are therefore a safe alternative to all population groups (De Schepper, 2010). Previous research studies using a form of homeopathic treatment have shown variable levels of effectiveness (Sabath, 2005; Ramguthy, 2010) and indicate that further research studies need to be conducted on individualised homeopathic treatment for chronic constipation to more fully explore its effectiveness in treating patients with chronic constipation.

LITERATURE REVIEW SUMMARISED

Prevalence of constipation

Statistics show that constipation affects between 2.5-79% of the adult population worldwide. The wide range in this percentage is due to factors such as subjective interpretation of constipation, percentage of sufferers actively seeking out medical treatment or visiting physicians with constipation being their main complaint as compared to those who do not report their symptoms, and availability of data (Mugie *et al.*, 2011). Developing countries, with Africa in particular, have limited literature available on the prevalence of constipation. Available figures for South Africa show a 29.2% prevalence of constipation. However, due to the nature of the study (Meiring and Joubert, 1998) from which this figure was obtained, it cannot be generalised to the rest of the population. Statistics also show a higher incidence of constipation amongst the black ethnicity, lower income households, overweight and inactive individuals, females and those who received a lower level of formal education (Mugie *et al.*, 2011). A 'Social profile of South Africa 2002-2009' compiled by Statistics South Africa (2010) indicates that a high percentage of the South African population falls within the categories mentioned above. As such the possibility of a high prevalence of constipation amongst the South African population is probable.

Aetiology, Types and Pathophysiology of Constipation

Constipation may be a condition in its own accord, or a symptom resulting from another pathology. It may be as insignificant as a nuisance symptom at one extreme, or a sign of a severe condition at the other extreme. The causes of constipation are many and widespread. To simplify they have been categorised as being either primary: of a gastro-intestinal origin, or secondary: due to non-gastro-intestinal disorders and external factors (Davidson, 2010).

Constipation is divided into three types: slow transit, normal transit or outlet dysfunction constipation. Slow transit constipation arises when there is impaired motility of the colon, often due to neural disruption (enteric or autonomic nervous system) or disorders of the colonic smooth muscle, which delays the fecal transition time through the colon. This type of constipation is distinguished by infrequent bowel movements. Normal transit constipation refers to regular bowel movements of hard stools with difficult evacuation. This type is generally caused by external factors such as dietary choices, dehydration, physical inactivity and repetitively suppressing the urge to defecate. Outlet dysfunction is due to problems arising

from the pelvic floor musculature or the anal sphincter, and presents with difficulty in evacuating the stool (Andrews, 2011; McCance *et al.*, 2010; McCrea, 2008a).

Symptoms and Complications

There exists a multitude of symptoms associated with constipation. First hand symptoms include infrequent bowel movements, difficult evacuation of stool which require much straining, hard stools, decreased stool volume and the sensation of incomplete evacuation. The abdomen may become hard or distended and the person may experience either abdominal pain, slight abdominal discomfort or a sensation of fullness. Nausea, loss of appetite and loss of weight may also accompany constipation. Due to excessive straining, the heightened pressure in the area may result in fissuring at the entrance of the anal canal, engorged haemorrhoidal veins and possible rectal prolapse. With extreme constipation the fecal matter may become impacted in the bowels causing a complete obstruction and increasing the risk of bowel perforation. Concomitant symptoms include halitosis, thirst, lowered immunity, fatigue, depression or moodiness, headaches and a foggy mind (Bharucha, 2011; Longmore, 2012; Marks, 2012; McCance *et al.*, 2010).

Assessing the Severity of Constipation

Constipation can be assessed by the extent of its symptoms. Various scoring systems are available to evaluate the severity of constipation and to monitor treatment outcomes (Sharma and Agarwal, 2012).

A bowel function diary is a tool that can be used to monitor the extent of constipation. It is completed after each bowel movement or every evening. It comprises of three modules which assess varying aspects related to constipation in order to obtain a complete presentation of the patient's experience of constipation. The first module monitors the bowel movement itself using a five-point scale to score the degree of straining, completeness of evacuation, presence of rectal pain and stool consistency. It is filled out after every bowel movement and therefore also gives an indication of bowel movement frequency. The second module is completed at the end of each day and records the number of failed attempts at defecation on that day, as well as the presence of bloating, flatulence, loss of appetite and abdominal pain experienced throughout the day. The third module indicates whether any form of assistance (manual, fibre, laxatives or enemas) was used to aid defecation on that day (Camilleri *et al.*, 2011).

The Bristol Stool Form Scale is a seven score visual scale used to measure stool consistency. Being a visual scale it provides greater uniformity when scoring stool form and is a reliable measurement tool in assessing stool form in younger age groups (Chumpitazi *et al.*, 2011).

Conventional Treatment

The treatment protocol for chronic constipation requires that any underlying medical condition that could be causing the constipation is identified and appropriately managed. Thereafter dietary and behavioural aspects are to be corrected and laxatives added in conjunction. If the constipation is not relieved satisfactorily then enemas are indicated. Surgery is the final resort in extreme cases (Ringel, 2005). Current patient satisfaction levels with the standard available treatment strategies are only partially favourable (Johansen and Kralstein, 2007) and additional management approaches need to be explored.

Laxatives: As a general guideline, laxatives should be used sensibly as some laxatives may bind to drugs and interfere with the drug's absorption. Laxatives which increase colon transit time may also prevent optimal absorption of certain nutrients and drugs. Laxative usage is contra-indicated in intestinal obstruction, fecal impaction, inflammatory bowel disorder and severe abdominal pain of unknown aetiology. Some of the adverse effects associated with laxative use includes: nausea, bloating, flatulence, rectal irritation, abdominal cramping, diarrhoea and dehydration. Excessive use or long-term use of laxatives may decrease rectal sensitivity and impinge normal defecation thereby causing dependency (Bharucha, 2011; Johansen, 2007; Wald, 2007). Laxatives are categorised as follows:

- a) **Stimulant laxatives:** Stimulant laxatives work by causing an irritation to the intestinal mucosa or through direct stimulation of the plexuses in the colon wall. This encourages colonic contractions that propel the stools forward. Examples include castor oil, senna (*Cassia senna*), cascara (*Rhamnus purshiana*), bisacodyl and anthraquinones (Bharucha, 2011; Johansen, 2007; Wald, 2007).
- b) **Bulk-forming laxatives:** Bulking agents add bulk to the stool allowing it to retain a higher water content thus forming a soft, bulky stool. The bulkier stool also stimulates peristalsis in the colon. Psyllium husk, dietary fibre and methylcellulose are examples of bulking agents (Bharucha, 2011; Johansen, 2007; Wald, 2007).
- c) **Osmotic laxatives:** This type of laxative makes use of osmotic agents such as polyethyl glycol, lactulose, sorbitol, magnesium, phosphates or sulphates. Osmotic agents are

poorly absorbed, thus remaining in the bowel where they disturb the osmotic gradient and cause more water to be drawn into the colon. A higher water content in the stool makes it softer and larger, and the increased intestinal volume causes an increase in peristaltic contractions (Bharucha, 2011; Johansen, 2007; Wald, 2007).

- d) Emollient laxatives: An emollient laxative lubricates the stool thus preventing colonic absorption of water from the stool. This softens the stool and avoids it being further dehydrated. It does not stimulate peristaltic action though. Docusate and mineral oil are commonly used emollients (Bharucha, 2011; Johansen, 2007; Wald, 2007).

Enema: An enema is the administration of either ordinary water or a hypertonic solution into the rectum in order to lubricate the stool to aid bowel evacuation. Regular use of hypertonic solution enemas should be avoided as it may lead to electrolyte imbalances (Bharucha, 2011).

Pharmacological agents: the following two drugs fall within the protocol of treating chronic constipation.

- a) Serotonergic agents: The neurotransmitter serotonin facilitates intestinal motility and secretion. 5-HT₄ agonists such as the drug Prucalopride promotes serotonin levels and helps alleviate constipation (Emmanuel *et al.*, 2014; Johansen, 2007; McCance *et al.*, 2010).
- b) Opioid receptor antagonist: This is a treatment option specifically for opioid-induced constipation, and is reserved for terminally ill patients only (McCance *et al.*, 2010).

Surgery: The most common choice of surgical treatment for constipation involves the removal of the colon (subtotal colectomy) and the formation of a new connection between the ileum and rectum (ileorectal anastomosis). This option is only considered for those patients who experience severe slow-transit constipation that is not responsive to general management guidelines or aggressive medical treatment (Ringel, 2005).

Complementary and Alternative Management

The list below outlines some alternative approaches to managing constipation naturally:

Stress Reduction: When experiencing stress, the body favours sympathetic innervation which opposes optimal digestive functioning. Stress management and relaxation techniques assist in reducing the sympathetic nervous response, and promotes parasympathetic innervation, which is conducive for proper functioning of the digestive tract (Guyton and Hall, 1996).

Herbal Treatment: Herbs are popularly used to alleviate constipation. Senna (*Cassia senna*), cascara (*Rhamnus purshiana*) and aloe (*Aloe vera*) are herbs that act similarly to stimulant laxatives, while psyllium husk and flaxseed are good bulking agents. Bitter herbs, such as dandelion (*Taraxacum officinale*), stimulate bile flow which helps to lubricate the intestinal tract and ease constipation (Caruso, 2008).

Probiotics: A study comparing the intestinal ecosystem in constipation sufferers to healthy people shows a difference in the intestinal microflora (Zoppi *et al.*, 1998). A systematic review conducted by Chmielewska and Szajewska (2010) indicates that supplementation of the probiotics *Bifidobacterium lactis DN-173 010*, *Lactobacillus casei Shirota* and *Escherichia coli Nissle 1917* show effectiveness in increasing bowel movement frequency and improving stool consistency.

Magnesium: Magnesium is an indispensable mineral due to its involvement in numerous processes throughout the body. Amongst its actions it assists nerve transmission and muscle contraction, which in the colon can promote peristaltic action (Guerrera *et al.*, 2009). At higher dosages it draws water into the intestinal lumen, producing softer stools and increased intestinal volume which promotes defecation (Bharucha, 2011). Magnesium supplementation is advocated as an adjuvant even though clinical trials supporting its efficacy are scarce (Guerrera *et al.*, 2009).

Acupuncture: A systemic review by Zhang *et al.* (2013) indicates that acupuncture may improve weekly spontaneous bowel movements, associated symptoms and quality of life in chronic constipation sufferers and therefore may offer a safe alternative treatment to chronic functional constipation.

Biofeedback Training: This involves learning to correctly co-ordinate the muscles involved in defecation. Recent studies on the efficacy of biofeedback therapy indicate that it is superior to diet, exercise and laxative management when treating dyssynergic (problem with pelvic floor musculature) constipation (Rao, 2012).

Homeopathic Treatment

Homeopathy is believed to be most effective in treating chronic conditions before structural tissue changes have occurred. It is at the stage of functional disturbances that homeopathic intervention has the greatest effect. Homeopathic treatment not only relieves the presenting

symptoms but it serves to re-establish homeostasis within the body enabling a sustained cure (Jayasuriya, 2010).

Medhurst (2014) recommends the use of homeopathy for the management of constipation in the following cases: where the cause cannot be identified, when the constipation has not improved with previous treatments and where no other related pathological symptoms are present.

Ullman and Reichenberg-Ullman (1997) report that in cases of constipation where there is no impacted stool, obstruction of the bowel or need of surgery, homeopathic intervention can be expected to normalise bowel function within a few days or even a few hours.

Homeopathy can provide a safe, non-invasive and possible long-term solution to constipation. Its individualised approach takes into consideration the much individualised presentation of this condition (Grollmann and Maurer, 2002; Sabath, 2005).

METHODOLOGY

Research Sample

The sample was set at ten participants of either gender, between the ages of 18 to 50 years. Participants were recruited using non-probability convenient sampling by means of advertisements. These were placed around the University of Johannesburg, Doornfontein Campus with relevant permission. Participants meeting the requirements of the following selection criteria were included in the study.

Participant inclusion criteria:

- People between the ages of 18-50 years
- People meeting the Rome II criteria for constipation as listed hereunder:
 - A bowel evacuation of three or less times per week, for at least three months OR
 - Presence of straining, hardened stool, or incomplete bowel evacuation for at least 25% of the time, during the last three months (Longmore, 2012)

Participant exclusion criteria:

- People currently on treatment for their constipation
- People who used laxatives more than three times in the past month
- People on medications which have constipation as a side effect
- People with pre-diagnosed colon cancer, irritable bowel syndrome- constipation dominant, spastic colon or diverticulitis

- People who have had a stroke,
- Pregnant females

Research Design and Procedure

The research took the form of case studies conducted over a six-week period at the University of Johannesburg Homeopathy Health Training Centre. People who were interested in taking part in the research study were invited for an initial meeting in which they received a Participant Information Form. Volunteers who met the inclusion criteria were recruited and requested to sign a Consent Form. A Selection Questionnaire confirming their constipation status was completed by them with the help of the researcher. The participant then had their full case history taken and a physical examination was performed. The details obtained were recorded according to the format of the homeopathic Case Taking Form. The researcher worked under the supervision of a qualified homeopath for the purpose of case study reviews and remedy selection. The characteristic symptoms from the case were identified and analysed by repertorisation using the Mercurius Repertorisation Software version 5.2.1.0. (Van Zandvoort, 2009). Various Materia Medicas were consulted to check that the remedy was best suited to the presenting picture of the participant. The initial potency and frequency of dose of the remedy was standardised to 30cH, 10 drops taken once daily in order to ensure uniformity. The remedy was administered together with an explanation and a demonstration of how to take the medication. A set of written instructions was provided for the participant in the form of a Patient Information Leaflet. The participant was requested to monitor each defecation session and a Bowel Diary was used to record the frequency of defecation, the stool form and the level of difficulty on passing a stool. The participants were also requested not to make any alterations to their usual diet or any lifestyle changes that could affect their bowel habits. Participants returned for three follow-up consultations at two week intervals. At each follow-up the participant's case was re-evaluated with special attention made to changes in symptoms or the appearance of new symptoms. This was recorded on the Case Follow-up Form. Depending on the participants' response to the initial prescription, the remedy was either continued, the potency changed or a new remedy selected.

Reliability and Validity of Measurements

Constipation was evaluated in terms of the frequency of bowel movements, ease of bowel movement and stool consistency. These three measures are incorporated in the majority of the

numerous validated constipation evaluation scales, scoring systems and questionnaires (McCrea, 2008b).

Bowel Function Diary: The Bowel Function Diary is a daily record of factors relating to defecation. For the purpose of this study only two of the items were monitored, this being the number of bowel movements and the associated ease or difficulty of defecation. A study by Camilleri *et al.* (2011) demonstrates an acceptable test-retest reliability and supported validity for each item, with a p-value of <0.001 , and thus concluded that items from the Bowel Function Diary are a valid and reliable measure.

Bristol Stool Form Scale: The Bristol Stool Form Scale is a seven score visual scale to measure stool consistency. A study by Chumpitazi *et al.* (2011) concludes that the Bristol Stool Form Scale is a reliable and valid measure, and can be effectively used with participants over the age of eight for research purposes.

Data collection and analysis

Data collection was in the form of case studies. A full case history was taken at each consultation in order to monitor all aspects of the participants' progression of treatment. As such, a wealth of qualitative data was gained and these were then analysed for case management and described in written case studies. In addition, quantifiable data was collected by means of a Bowel Diary that was provided to the participants at each consultation. The participants used the Bowel Diary to record their bowel movement frequency and to monitor severity of associated symptoms. Details regarding the stool itself was evaluated using the Bristol Stool Form scale, whilst straining on defecation was measured using an Ease and Comfort scale. These results were then represented in the form of graphs. No statistical analysis was done due to the qualitative nature of the study and the small sample size.

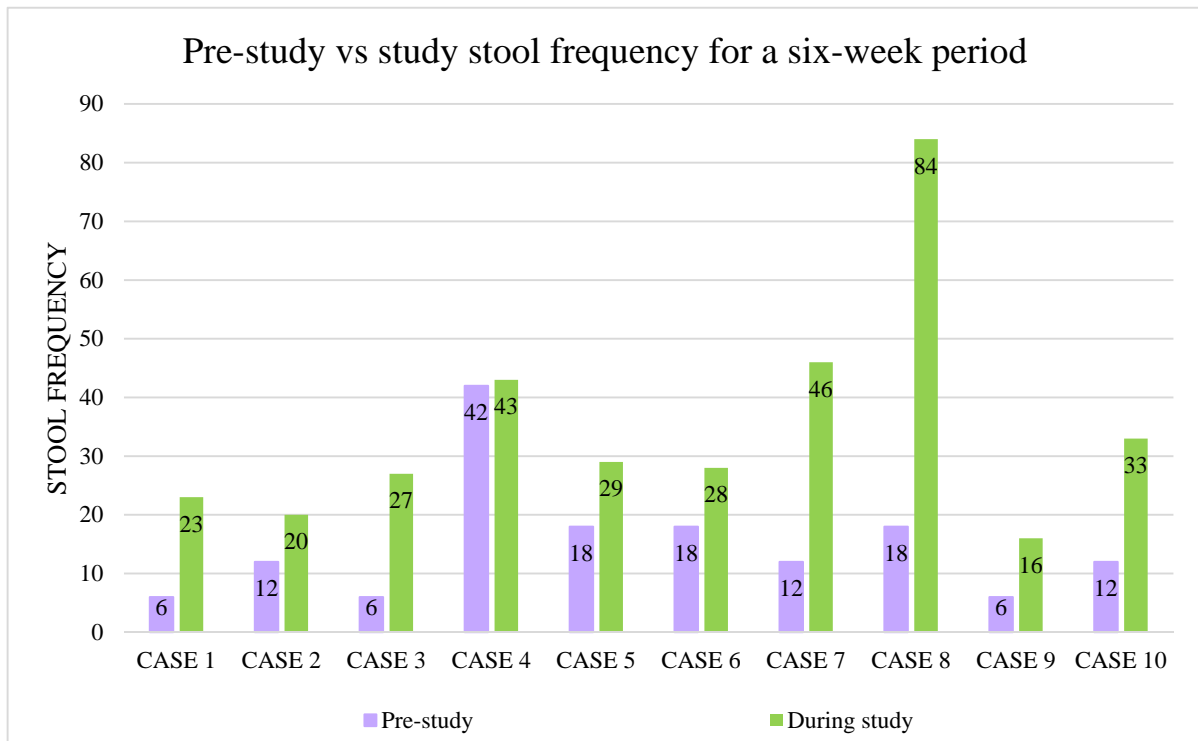
RESULTS

Improvement in Symptoms of Constipation

Nine participants presented with slow transit constipation, having infrequent bowel movements with concomitant symptoms of constipation. One participant presented with normal transit constipation, having daily bowel movements that were passed with difficulty. All ten participants experienced an increase in the frequency of bowel movements during the course of the study. All ten participants showed improvement in stool form and degree of straining during a bowel movement. In addition, most participants experienced amelioration in other

presenting symptoms of constipation. Six participants reported that they experienced much bloating and all six had complete amelioration. Five participants reported blood on wiping after a bowel movement; none of the participants experienced any blood on wiping at the completion of the study. Two participants had haemorrhoids that were very painful and in both cases the discomfort abated even though the haemorrhoids were still present. It was observed that all ten of the participants experienced either partial or total amelioration of their symptoms immediately after starting with the treatment. Seven participants considered themselves to be completely cured of their constipation after the study period; however, the long-term effects are unknown.

The graph below represents the stool frequency across six weeks for each participant, comparing an extrapolated pre-study frequency to the frequency during the study period. The pre-study figure was obtained by multiplying the baseline weekly figure by six to determine an expected frequency across six weeks. Every case depicts a marked increase in stool frequency while participating in the research study. Case 4 is an exception, being almost on par for pre-study and during study frequency; however, with this case the complaint did not refer to stool frequency but rather to stool form, ease of evacuation and completeness of evacuation.



Graph 1: Pre-study and During Study Stool Frequency for a Six-Week Period

Improvement in General Health and Wellbeing

The general health and wellbeing of each participant had also improved over the course of the study. Increased energy levels, indicating an increase in vitality, was reported by nine participants. Sleep quality, appetite, excessive/ offensive perspiration, dysmenorrhoea and premenstrual symptoms showed improvement in most of the participants that presented with such complaints. Five participants reported amelioration in co-existing ailments.

On a mental-emotional level, two participants had improved concentration and mental performance, and three participants had reduced anxiety and felt able to cope with stress better. Four participants reported an overall improvement in mood.

The above observations demonstrate that the individualised homeopathic prescription addresses the individual as a totality, enhancing their general and emotional wellbeing whilst relieving physical symptoms.

DISCUSSION

Demographics

The research comprised of ten case studies conducted at the University of Johannesburg Homeopathy Health Training Centre. Thirteen participants initially volunteered for the study, of which ten completed the study. The other three participants withdrew from the study due to experiencing difficulty with transportation to the University of Johannesburg Homeopathy Health Training Centre, and/or arranging follow-up dates that co-ordinated between the participants' working/lecture times and the University of Johannesburg Homeopathy Health Training Centre hours.

Advertisement for participation in the research study was solely at the University of Johannesburg and this accounts for why eight of the participants were university students. The other two participants were employed full-time and were existing patients of the University of Johannesburg Health Training Centre. As such, the average age range of the participants was between 21-28 years, with two participants over the age of forty. The study sample was of asymmetric gender distribution, with a female to male ratio of 8:2. Majority of the participants were of black ethnicity (seven), with two Indians and one Caucasian.

Satisfaction with Previous Management Strategies

Three of the participants had visited a clinic or been in hospital due to their constipation but with limited benefit. All ten participants had previously tried various forms of management strategies, comprising either over-the-counter laxatives, herbal constipation teas, drinking hot water daily or fibre supplementation. In the majority of the cases, the management strategies mentioned above were ineffective or only offered partial and/or temporary assistance. Concomitant symptoms of pain, discomfort and bloating were not relieved. Most participants were unhappy with the results of such strategies and thus did not persevere with them. This emphasises the results of the study by Johansen and Kralstein (2007) that patient satisfaction levels with many first-line management strategies for constipation are at best only partially favourable.

Satisfaction with Treatment whilst Participating in the Research Study

Although this research study had a short duration, all ten participants expressed satisfaction with the treatment over the course of the study.

Every participant claimed to have benefitted from the study, with their symptoms of constipation being partly relieved or completely resolved. Most of the participants also exhibited improvements in other aspects of their general health and expressed that they experienced an enhanced state of wellbeing.

Diet and Lifestyle

Although majority of the participants in the study were not following a particularly healthy diet, no dietary advice was given during the course of the study and participants were requested not to alter their usual diet. Even though the participants responded positively to the remedy, it does not discard the importance of correcting the diet. A poor diet encumbers optimal health and functioning, and could pose as an obstacle to cure in many health conditions (Caruso, 2008; De Schepper, 2010).

It was observed that only three of the participants adhered to the minimum recommended intake of two litres of water daily, and only four participants were engaged in some form of physical activity on a regular basis. Insufficient fluid intake and a sedentary lifestyle contribute to the incidence and severity of constipation (McCance *et al.*, 2010). Treatment outcomes may be enhanced if these factors are addressed simultaneously.

Observations and Reflections on the Homeopathic Prescriptions

All initial prescriptions were in the 30cH potency, with the dosage instruction of ten drops taken once daily. This method of prescribing ensured uniformity of the initial administration of the remedy, in order to limit treatment variables. The 30cH potency was decided upon as a good balance, as it was deep acting enough to also stimulate a response on the general and mental-emotional level, whilst limiting the possibility of aggravations. However, this approach did not adhere completely to the principles of classical prescribing, which tailors potency and repetition of dose when individualising the prescription (De Schepper, 2010). On the other hand, even though a fixed potency was used instead of an individually determined potency, every participant experienced a positive response to the prescription. This supports the concept discussed in Vithoulkas (1980) that the choice of potency is secondary to choosing the correct remedy.

Adjustments to the remedy, potency or repetition of dose were made at the follow-up consultations as deemed necessary. Participants were instructed to continue with the remedy until the completion of the study, after which they were advised to use the remedy only as needed. The approach of a continued administration of the remedy throughout the six-week period was adopted to exclude the possibility that a lack of improvement in the symptoms of constipation could be ascribed to insufficient administration of the remedy. This method did not adhere completely to the principles of classical prescribing, which directs that if dramatic improvements are seen (as in Case 2, 3, 4, 6, 7, 8 and 10) the remedy should be discontinued so as not to interfere with the curative action produced by the administered dose. A second dose should only be administered if improvements diminish and the original symptoms reappear (De Schepper, 2010). It is a possibility that with regard to Case 6 and 8, the continued dosing after a dramatic improvement had occurred could have been the cause of the relapse in some symptoms.

Homeopathic remedies are often considered to take a long time to work. However, it was observed that all ten participants experienced improvement within the first week of taking the remedy, with seven participants experiencing an improvement the very next day.

Eight different homeopathic remedies were prescribed: *Bryonia alba*, *Calcarea carbonica*, *Mercurius solubilis*, *Natrium muriaticum*, *Nux vomica*, *Pulsatilla* and *Sepia*.

The varied nature of the prescriptions demonstrates the highly individualised presentation of constipation. The remedy *Natrium muriaticum* was prescribed in four of the cases whilst the other remedies were prescribed once only.

This trend was also exhibited in the study by Sabath (2005) in which *Natrium muriaticum* was also the most commonly indicated remedy, being prescribed in three of the ten cases. *Natrium muriaticum* is also found in the homeopathic complex formula for constipation that was used in the trial by Ramguthy (2010). This highlights that *Natrium muriaticum* is strongly indicated in the treatment of constipation.

The *Natrium muriaticum* remedy picture conforms to the symptom picture of constipation. The theme of dryness, or altered water balance, in the remedy suits the pathophysiology of constipation, where insufficient water content in the bowels is the result of the constipation. The remedy *Natrium muriaticum* may regulate the fluid concentrations in the bowel, and as such acts similarly to osmotic laxatives. *Natrium muriaticum* is also well indicated for ‘holding onto things’, as often seen emotionally by the past griefs that they retain. On a physical level this characteristic of ‘holding on’ may exhibit at the level of the bowels, by the inability to ‘let go’ of the stools. With regard to aetiology, *Natrium muriaticum* is indicated in ailments arising from grief, loss or disappointment. Most people have experienced some sort of loss or disappointment, and this predisposes them to a *Natrium muriaticum* state (Murphy, 1988, Tyler, 2010, Vermeulen, 2011).

CONCLUSION

The research study was conducted with the aim of determining the efficacy of individualised homeopathic treatment on chronic constipation in adults. Ten participants willingly volunteered for and completed the study. All ten participants experienced a favourable progression in their symptoms of constipation, as well as an increased state of general wellbeing, and were consequently pleased with the improvements that had occurred.

The results showed that in all ten cases stool frequency had increased over the six-week study period. Stool form and ease of evacuation also showed an overall trend of improvement. The participants’ general sense of wellbeing and some of their other presenting symptoms also improved during the course of this study.

The results indicate that when an individualised homeopathic approach is correctly applied in a clinical setting, the homeopathic remedy appears to be able to assist in the treatment of chronic constipation in adults.

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