

Acupuncture for the Treatment of Normal Transit Constipation: A Case Report

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ABSTRACT

Constipation has a high level of prevalence among older females in developed countries like Australia. This case report documents the acupuncture treatment of an 85-year-old female who presented to a student acupuncture clinic with the chief complaint of chronic constipation. The patient had experienced fifteen years of restricted bowel movements, with associated straining and sensation of incomplete evacuation. Her condition had not benefited substantially from Western medicine or consultation with a nutritionist. Secondary symptoms/complaints included neck pain, lower back pain, deteriorating eyesight and headache. Acupuncture was the primary intervention utilised in accordance with a number of classic point formulae, in combination with patient education to eliminate the herbal supplement and address dietary concerns. After weekly acupuncture treatments over eight weeks, the patient reported no longer experiencing constipation and this effect had lasted up until the time of writing. Similar results were attained for each of the patient's secondary complaints.

KEYWORDS chronic constipation, normal transit constipation, neck injury, headache, purgatives, acupuncture, moxibustion.

Introduction

Constipation is defined as the infrequent passage of hard stools with possible straining, abdominal or rectal discomfort, and the sensation of incomplete evacuation.¹ A systematic review of epidemiological studies for constipation in Australia and Europe has found prevalence ranges from 12% to 19%, with a female to male ratio of more than two to one.² Prevalence increases with age, and the incidence of chronic constipation in women over the age of 70 is 25%.³ Conventional Western medical treatment for constipation varies with aetiology but often relies on dietary modification, use of laxative medications and in severe cases corrective surgery.⁴

The treatment of constipation with acupuncture was first documented in the Jin Dynasty (265–420 CE) by Huang Fu Mi

in *The A-B Classic of Acupuncture and Moxibustion*. According to the protocol of a Cochrane systematic review,⁵ many clinical trials for the treatment of constipation with acupuncture have been conducted, but in general, those studies have produced inconclusive results.⁵ A review of modern traditional Chinese medicine (TCM) literature finds that protocols for acupuncture treatment of constipation are well established.^{6–9} The treatment detailed in this report was formulated in accordance with these protocols.

Case history

The patient had been receiving acupuncture intermittently for six months before the first consultation with the author at the Endeavour College of Natural Health (formerly ACNM).

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The earlier acupuncture treatments had yielded short-term symptomatic relief, without the long lasting improvement that the patient desired. The main complaint was chronic constipation, a diagnosis based on a 15-year history of sluggish bowel movements, with associated straining and the perception of incomplete evacuation. One episode of straining had precipitated a transient ischaemic attack, as diagnosed by her general practitioner (GP) 18 months previously.

The patient was achieving three bowel motions per day for the past six months using Cascara Sagrada (*Rhamnus purshiana*), a herbal laxative native to North America. The patient was recommended Cascara by a health food shop attendant and its daily use had increased her bowel movements from three per week, to three per day. This change in frequency had prompted the patient's GP to make the diagnosis of normal transit constipation, for, despite the frequent bowel movements, the patient believed that she was still constipated. Further research revealed that Cascara is strictly contraindicated for use after eight to ten days from the initial dose.¹⁰ According to Mills and Bone, 'Chronic use may cause transient pigmentation to the wall of the colon' that has been linked to the incidence of colorectal cancer.¹¹

The patient reported that her stools were small, dry pebbles that were difficult to pass, which indicates blood deficiency.⁸ However, upon questioning, the patient reported a persistent feeling of distension on the left side of the abdomen superior to the umbilicus, coupled with a 'twisting sensation' in the abdomen inferior to the umbilicus. In TCM terms, the twisting sensation indicates cold, qi or blood stagnation and the abdominal distension indicates Spleen qi deficiency or dampness.¹² The patient described the twisting sensation as 'feeling like a kink in the bowel', worse before defecation and only temporarily relieved by subsequent bowel movement, which is suggestive of a full pattern. Overall, this combination of symptoms pointed to a complex aetiology that seemed, in the absence of other stimuli, to be related to the prolonged use of Cascara.

The patient presented with the secondary complaints of neck pain, headache, lower back pain and eye pain. Her eye problems included near blindness of the right eye and deteriorating vision of the left eye. She also suffered macular degeneration and was receiving monthly intraocular injections of the anti-angiogenic drug Lucentis. The patient reported lower back pain, which was more prevalent at the end of the day and exacerbated by such tasks as hanging out washing or carrying groceries. Her neck and lower back pain had been present since the age of 20, when a fall from a horse had resulted in a hairline fracture of C4. In the 65 years since her fall, she had experienced intermittent neck pain, which had worsened in severity and frequency in the last five years. After

the transient ischaemic attack 18 months before, the patient's GP had diagnosed high blood pressure and prescribed Prinivil, an anti-hypertensive drug.

Palpation of the neck revealed a tight, convoluted fibrosis on the left side of the transverse processes of the third and fourth cervical vertebrae, near the acupuncture point LI 18 *Futu*. The patient reported that episodes of pain began as stiffness on the left side of the neck that radiated to the occipital region, before moving into a headache focused behind the left eye (the eye in which she had been receiving Lucentis injections). Range of movement (ROM) examination of the neck showed limitation in all directions. The patient experienced pain when flexing forward or rotating bilaterally. When asked to rate her pain level on a scale of zero to ten, with zero being no pain and ten being excruciating pain, her neck pain registered as a consistent seven out of ten. Palpation of the lower back revealed severe bilateral tightness in the quadratus lumborum muscles around BL 23 *Shenshu* to BL 25 *Dachangshu* and in the erector spinae muscles near BL 20 *Pishu* to BL 21 *Weishu*. The patient's lower back pain registered as five out of ten. Her headaches were dull and throbbing, registering five out of ten and occurring on average every second day.

The patient frequently missed lunch or breakfast, which in Chinese dietetics is seen as a possible cause of injury to the Spleen.¹³ She reported drinking a litre and a half of water per day and three to five cups of tea or coffee. She had flushed cheeks and the lenses of her eyes had a discernible opacity. The patient reported sleeping uninterrupted for nine hours per night from nine o'clock pm to six o'clock am. She had a warm internal temperature with 'five hearts hot' and flushing of the chest and throat. She often felt warm at night, sleeping with little more than a sheet. She preferred cool drinks and rarely perspired. Despite her many health issues, the patient was lucid, alert and in good spirits.

The patient's radial pulse was fine and weak in both lower *jiao* positions representing the Kidneys, less weak in the Spleen position, normal or unremarkable in the Liver position and throbbing in both the upper *jiao* positions. The patient's tongue was thin, with a pink/red body, fine cracks and a clear wet coating. The thin tongue with pink/red body and fine cracking is indicative of chronic yin deficiency.¹² The weakness of the pulse in the lower *jiao* positions suggested the presence of Kidney deficiency and the throbbing in the upper *jiao* represented the presence of heat. In combination, this pulse presentation pointed towards the presence of Kidney yin deficiency.

TCM DIFFERENTIAL DIAGNOSIS

This patient presented a complex case with contradictory clinical features and an overall presentation that did not easily

fit any one pattern. The root cause of the constipation was difficult to ascertain, in large part because the patient's reliance on Cascara might have masked many of the signs that would determine which TCM pattern was primarily involved. For example, the patient passed dry, pebble-like faeces, which could indicate blood deficiency, but the patient no longer strained when defecating, nor had the pallor, palpitations, pale tongue or thready/choppy pulse to confirm blood deficiency.^{8,9} The patient suffered from abdominal distension, which may indicate Spleen qi deficiency or damp, but no other symptoms presented which would relate to these patterns.

The student practitioner who treated the patient previously had made the primary pattern diagnosis of Liver qi stagnation attacks Spleen. Treatments had focused on harmonising the Liver and tonifying the Spleen with the primary points: LR3 *Taichong*, LR13 *Zhangmen*, BL18 *Ganshu*, CV12 *Zhongwan*, SP6 *Sanyinjiao*, ST36 *Zusanli* and BL20 *Pishu*. The diagnosis of Liver attacks Spleen was possible because of excess Liver related signs such as eye problems and headaches focused around the eyes, coupled with the Spleen deficiency sign of abdominal distension, but the patient's pulse, age and lack of corroborating Liver qi stagnation and Spleen deficiency signs made this diagnosis unlikely.

In TCM, constipation is caused by pathologies that disrupt the Spleen, Stomach, Kidney, Liver and Lung, and ultimately impair the Large Intestine's function of transmitting and excreting stools.⁸ The various patterns that are associated with constipation are heat accumulation, qi stagnation, qi deficiency, blood deficiency and yang deficiency.⁸ These patterns are broadly divided into deficiency and excess types, but in this case both deficiency and excess signs were present. For example, there were indications of heat, such as dry faeces, internal warmth, flushing in the chest and throat and 'five hearts hot', but no signs of full heat, such as rapid pulse, red tongue with yellow coat or foul smelling stools and breath.

Deficiency signs were observed in the pulse and tongue, and because of the patient's age it was assumed that some element of Kidney qi deficiency was present.¹² This was confirmed by the lower back ache arising from such tasks as hanging out washing or carrying shopping. The combination of Kidney deficiency signs coupled with mild heat signs in the upper *jiao*, suggested a deficiency of Kidney yin.¹⁴ As people enter old age, the yin aspect of the body, particularly Kidney yin, starts to decline, and this effect is often compounded by long-term purgative use.⁸ The Kidney opens out into the two orifices of the lower *jiao* and is associated with defecation and urination. It also influences the functioning of the Lung which has an important role in assisting the Large Intestine to eliminate waste from the body. The absence of specific symptoms reflecting Lung dryness such as sore, dry throat and dry mouth

made it difficult to include Lung Yin Xu as a major aetiology in this case.

With the additional information concerning the patient's neck injury, which centred on the Large Intestine channel at LI18 *Futu*, it was considered that some relationship may have existed between the Large Intestine channel obstruction and the obstruction in the large intestine itself. The concept that channel obstruction may affect organ function has many empirical precedents and is accepted as a facet of channel theory.⁶ In this case it was considered that the neck injury centred on the Large Intestine channel may have contributed to the constipation in the large intestine organ.

Kidney yin deficiency coupled with Large Intestine organ and channel obstruction were considered the primary causative factors of the patient's constipation. In light of this aetiology, the acupuncture treatment focused on clearing stagnation in the Large Intestine and tonifying Kidney yin. The fact that the patient was elderly also had a bearing on the application of the treatment as it is considered unwise to over-select points in older patients whose constitution is typically weaker.¹⁴

CONSTIPATION IN WESTERN MEDICINE

In Western medicine the majority of constipation cases are functional disorders that have no identifiable structural cause.¹ Normal transit constipation is the most common constipation type and involves a normal rate of colonic motility (the contraction and relaxation of muscles to move contents through the colon), but the patient perceives constipation.¹⁵ Changes that occur in normal transit constipation relate to stool consistency, the possibility of increased rectal contraction, and decreases in rectal sensation.¹⁶ Stools are often hard and dry making them difficult to pass and this may result in bloating and abdominal pain and discomfort.¹⁶ The causes of normal transit constipation are not completely understood, but are believed to be due to the perception of difficult evacuation, the presence of hard stools, and psychological factors that inhibit defecation.¹

TCM DIAGNOSIS

Stagnation in Large Intestine organ and channel, and Kidney yin deficiency.

TCM TREATMENT PRINCIPLE

Moisten and move stagnation in the Large Intestine organ, clear stagnation in the Large Intestine channel and tonify Kidney yin. This treatment principle was focused on clearing stagnation in the Large Intestine organ, which is central to any constipation treatment, and clearing stagnation in the Large Intestine channel, which addresses the relationship between the patient's neck injury and her bowel dysfunction. The tonification of Kidney yin was aimed at moistening the lower

jiao to complement the effect of the constipation treatment, and target the patient's lower back pain and empty heat signs.

TCM TREATMENT PLAN

Acupuncture for constipation: ST25 *Tianshu*, BL25 *Dachangshu*, TE6 *Zhigou* – reduce; KI6 *Zhaohai* – tonify. Acupuncture for neck and headache: LI4 *Hegu*, LU7 *Lieque* and *Ashi* points near LI 18 *Futu* – reduce. Acupuncture for low back: BL23 *Shenshu*, BL25 *Dachangshu*, BL40 *Weizhong* – tonify. The addition of needle head moxa to ST 36 *Zusanli* was introduced in the fourth treatment for general constitutional qi and blood tonification.

TCM TREATMENT RATIONALE

The treatment of all constipation types commonly involves needling ST25 *Tianshu* and BL25 *Dachangshu*, along with

TE6 *Zhigou* and KI6 *Zhaohai*.⁶⁻⁹ ST25 *Tianshu*, the Front *Mu* point of the Large Intestine, is a major point in treating all constipation types and has the widest application of any point for treating Large Intestine conditions.¹⁷ BL25, the Back *Shu* point of the Large Intestine, is used to supplement any treatment that focuses on the Large Intestine and is used for constipation of any aetiology.¹⁷ TE6 is another major point in the treatment of constipation and is used to move qi in the Large Intestine.¹⁷ KI6 is commonly seen in constipation protocols because it stimulates moistening of the lower *jiao* and is the best point to tonify Kidney yin.¹² The effect of this combination of points is summarised in Table 1.

METHODOLOGY

The intervention consisted of one acupuncture treatment per week performed over an eight-week period. Hwato brand

TABLE 1 Patient progress chart

Treatment	Cascara tablets per day	Bowel movements per day	Abdominal distension and discomfort	Stool formation	Neck pain (1-10)	Headache/eye pain (1-10)	Lower back pain (1-10)	Points selected
Treatment 1	3	3	Twisting sensation, distension and discomfort	Hard, dry, pebble-like, unsatisfying to pass	7/10	5/10	5/10	ST25, BL25, TE6, KI6, LI4, LU7, <i>Ashi</i> points, BL23, BL40
Treatment 2	3	3	Decreased sensation of discomfort and distension	Hard, dry, pebble-like	5/10	0/10	3/10	As per treatment 1
Treatment 3	1	1-2	Further decrease in discomfort and distension	Improved, but still hard and dry	3/10	0/10	2/10	As per treatment 1
Treatment 4	1	1-2	No distension or discomfort	Softer, more wholly formed	2/10	0/10	1/10	As per treatment 1, with the addition of needle head moxa on ST36
Treatment 5	1 every 2 days	1-2	Nil	Softer again, more wholly formed	1/10	Improved eyesight reported by optometrist	0/10	As per treatment 4
Treatment 6	1 every 2 days	1-2	Nil	Firm, soft and contiguous	1/10	0/10	0/10	As per treatment 4
Treatment 7	0	1-2	Nil	Firm, soft and contiguous	1/10	0/10	0/10	As per treatment 4, minus TE6
Treatment 8	0	1-2	Nil	Firm, soft and contiguous	1/10	0/10	0/10	As per treatment 7, minus ST25

stainless steel needles were used (0.25 mm in diameter and 30 mm in length). The needles were inserted bilaterally and retained for an average of 15 to 20 minutes. The formulation of point selection by the author in consultation with the co-author conformed to protocols established in modern TCM literature.⁶⁻⁹ Palpation of the injured area enabled selection of *Asbi* points of the neck. The most painful points were treated using a non-retaining needling technique.¹⁸ Needle insertion for each point was performed to a depth recommended by conventional TCM textbooks.^{6,19} Research studies have shown that some points have a proven efficacy when needled to a specified depth. For instance, ST25 *Tianshu* effectively treats all types of constipation when needled to a depth of 1–1.5 cun.²⁰ Needles were stimulated until *deqi* was elicited. The patient reported no adverse events during or after treatment.

CONCURRENT TREATMENTS

As the patient was self-prescribing the herbal laxative Cascara, the author asked her to reduce its intake to one tablet per day. This diminished regime lasted for two weeks before the patient reduced her intake to one tablet every two days. After another two weeks, the patient ceased taking Cascara altogether. The initial reduction of Cascara had the immediate effect of restricting the patient's bowel movements to one to two movements per day. This frequency continued until the end of the treatment course. As the defecation frequency decreased, her stool formation and abdominal discomfort rapidly improved. No headaches occurred after the first treatment. Following the third treatment, the patient reported no abdominal distension or discomfort. After the fourth treatment, her stools were soft, well formed and generally satisfying to pass.

When the patient visited her optometrist following the fourth treatment, he was surprised to find that her eyesight had improved. By the fifth treatment the patient no longer experienced lower back pain and her six-decade-old neck pain had stabilised to a level of one out of ten, with a 20% overall increase in ROM. The patient felt less internal heat and was now sleeping with a quilt. Her eyes showed greater brightness and her face was much more vibrant. In the final two treatments, she reported experiencing an excess of energy that 'she did not know what to do with'.

As shown in Table 1, this across-the-board improvement occurred without any major modification to the point prescription selected for the first treatment. After four treatments, ST36 *Zusanli* was added to the protocol to strengthen qi, build blood and bring balance to a treatment that had been primarily dispersing in nature. After the sixth treatment, points were gradually subtracted from the prescription, as the patient's symptoms of constipation no longer persisted. After eight treatments both the patient and author were satisfied that further treatment was no longer necessary.

Clinical Commentary

This case report will be of interest to the many TCM practitioners who see patients with chronic constipation. Constipation is a common disorder that affects more than one in ten Australians. Patients with chronic constipation are often prescribed purgatives to stimulate bowel function, but long term use may produce harmful side effects. The acupuncture treatment described in this report effectively resolved a fifteen-year-old case of normal transit constipation and provided a safe alternative to long-term purgative use. Secondary symptoms of neck pain, back pain and headache were also successfully treated. These results were obtained using simple yet effective acupuncture protocols that may be employed by any TCM practitioner.

Discussion

The outcome of this intervention indicates the systemic value and usefulness of acupuncture for the treatment of normal transit constipation in older patients. It highlights how the systematic approach of TCM diagnosis can enable a practitioner to identify salient information from a complex clinical presentation to form an appropriate treatment response. By employing a number of simple, well-established point formulae over eight weeks, acupuncture was effective in treating the patient's chronic constipation, neck pain, lower back pain and headaches.

The combination of three major changes implemented during the treatment course may have contributed to the remarkable improvement in the patient's constipation and associated symptoms. The first related to a revised pattern diagnosis that shifted the focus of the intervention from a root treatment of Liver qi attacks Spleen, to a root and branch treatment of Large Intestine stagnation and Kidney yin deficiency. The second involved the withdrawal of Cascara from the patient's medication regime, which allowed acupuncture to regulate stool consistency and defecation frequency. The third change came after the patient increased the number of meals consumed to three per day, providing the Spleen with more nourishment and the Large Intestine with more substance to discharge.

Three months after the final recorded treatment, the patient returned to the student clinic to report that she continued to be untroubled by any symptoms of constipation and improvement

was maintained for each of her chronic conditions. This patient was constipated and sought treatment for 15 years. Therefore, the number of weeks it took to rectify the problem is small in comparison.

In conclusion, there is currently a paucity of research that examines the effectiveness of acupuncture for normal transit constipation. The successful application of acupuncture in this case study suggests that such research is needed, as it is an area where acupuncture can establish itself as a safe, effective and inexpensive treatment option. In this patient's case, a number of conditions were treated successfully. Therefore it can be posited that acupuncture is a versatile modality that may improve the quality of life of chronic constipation sufferers in a short time.

References

1. Lembo A, Camilleri M. Chronic constipation. *N Engl J Med* 2003;349(14):1360–8.
2. Peppas G, Alexiou VG, Mourtzoukou E, Falagas ME. Epidemiology of constipation in Europe and Oceania: a systematic review. *BMC Gastroenterol* [serial online]. February 2008 [cited 27 May 2008]. Available from: BioMed Central, <http://www.biomedcentral.com/content/pdf/1471-230X-8-5.pdf>.
3. Choung RS, Locke GR, Schleck CD, Zinsmeister AR, Talley NJ. Cumulative incidence of chronic constipation: a population-based study 1988–2003. *Constipation Research Today* [serial online]. November 2007 [cited 27 May 2008]. Available from: <http://constipation.researchtoday.net/archive/4/11/166.htm>.
4. McCrea GL, Miaskowski C, Stotts NA, Macera L, Varma MG. Pathophysiology of constipation in the older adult. *World J Gastroenterol* 2008;14(17):2631–8.
5. Zhao H, Liu JP, Liu ZS, Peng WN. Acupuncture for chronic constipation. *Cochrane Database Syst Rev* 2008(4).
6. Shanghai College of Traditional Medicine. *Acupuncture: a comprehensive text*. O'Connor J, Bensky D, editors and translators. Seattle: Eastland Press; 1981.
7. Ellis A, Wiseman N. *Fundamentals of Chinese medicine*. Brookline, MA: Paradigm Publications; 1996.
8. Shi A. *Internal medicine*. Lin SS, Caldwell L, editors. Walnut, CA: Bridge Publishing Group; 2003.
9. Xinnong C, editor. *Chinese acupuncture and moxibustion*. Rev ed. Beijing: Foreign Language Press; 1999.
10. RxList. Cascara. RxList Herbal FAQ [online]. 1999 [cited 18 March 2008]. Available from: http://www.rxlist.com/cgi/alt/cascara_faq.htm.
11. Mills S, Bone K. *The essential guide to herbal safety*. New York: Elsevier; 2005.
12. Maciocia G. *The foundations of Chinese medicine*. Edinburgh: Churchill Livingstone; 1989.
13. Pitchford P. *Healing with whole foods: oriental traditions and modern nutrition*. Berkeley, CA: North Atlantic Books; 1993.
14. Maciocia G. *Diagnosis in Chinese medicine*. Edinburgh: Elsevier; 2004.
15. Kumar P, Clark M. *Clinical medicine*. Edinburgh: Elsevier; 2005.
16. Lembo A. Chronic constipation. *Gastroenterol Hepatol Annu Rev* 2006;1:55–61.
17. Deadman P, Al-Khafaji M. *A manual of acupuncture* [CD-ROM]. East Sussex: Journal of Chinese Medicine Publications; 2000.
18. Legge, D. *Close to the bone*, 2nd ed. Woy Woy, NSW: Sydney College Press; 1997.
19. Ellis A, Wiseman N, Boss K. *Fundamentals of Chinese acupuncture*. Taos, NM: Paradigm Publications; 2004.
20. Cui S. Clinical application of acupoint tianshu. *J Tradit Chin Med* 1992;12(1):52–4.