



The Effectiveness of Thai Traditional Massage in Improving Constipation at Institute of Thai-Chinese Traditional Medicine Hospital, Mae Fah Luang University

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ABSTRACT

Introduction: At present, constipation is most common in the world, including in Thailand, and if left for a long time. This can lead to many complications and affect daily life. Today, the treatment for constipation most of them uses laxatives. Long-term use of laxatives can cause drug resistance. Therefore, the purpose of this study is to study the effectiveness of Thai traditional massage in improving constipation and the study satisfaction with the treatment of chronic constipation.

Methodology: This study was a one group study design, clinical trial in patients with chronic constipation. The research participants were female or male, aged 20 - 45 years, residing in Chiang Rai province. Thirty subjects had constipation according to Rome III criteria and were diagnosed with constipation that wasn't caused by mechanical obstruction or due to another cause such as cancer by a modern physician. All will be treated with Thai traditional massage and herbal compresses to treat chronic constipation for a period of 1 day and collected data with measuring instruments, including a recorded form.

Results: The study showed improved behavior of defecation, urination, and decreased use of laxatives. There was an increase in the number of times defecation. Difficulty in defecation, inability to defecate, abdominal pain during defecation, time to use defecate, and use of laxatives or manual maneuvers to facilitate defecations are decreased. In addition, the satisfaction of the research participants in terms of quality of service, quality of treatment, and overall satisfaction level were strongly satisfied.

Conclusion: The study had shown that Thai traditional massage for chronic constipation helps to stimulate the frequency of bowel movements without any side effects. It was concluded that the Thai traditional massage was safe and suitable to be used to treat primary constipation.

Keywords: *constipation, chronic constipation, Thai traditional massage*

Introduction

At present, constipation is most common in the world, including in Thailand. The most common group is between the ages of 20 and 40 [1]. Chronic constipation most patients will have symptoms of having lumpy or hard stools, rarely feeling pain to

defecate, taking a very long time to the stool, or failing to the stool [2]. In addition, environmental factors may cause constipation, such as housing, cold weather, or the economy.

There are both medicinal and non-medicated methods of treating constipation. Most drug-based

treatments are laxatives, but should not be used continuously for the long term, which can cause drug resistance [3], and non-medicine treatment such as behavior modification drinking plenty of water, at least 1.5 to 2.0 liters per day, light to moderate daily exercise may increase bowel movements. [2]

In Thai traditional medicine Constipation is likened to Dan-Lom. Incomplete defecation, difficulty in defecation, feces hard like goat feces. [4]. Herbal compress relieves pain, reduces muscle spasms, improves blood circulation. and the aroma of herbs helps to relax.

Chronic constipation if left untreated for a long time. It can lead to systemic diseases, such as colorectal ulcers, hemorrhoids, etc. Including affecting the quality of life's daily life [5]. The researcher is interested in studying the effectiveness of Thai traditional massage in improving constipation because in the treatment of chronic constipation there are many studies, including both medicinal and non-medicated methods of treating constipation, medicinal [6] herbs [7], and self-acupressure on pregnancy-related constipation [8]. However, the effectiveness of Thai traditional massage in improving constipation in Chiang Rai province has not been studied, and if Thai Traditional massage can be used to affect the treatment of patients with chronic constipation. It can reduce the complications of chronic constipation and improve the quality of life. Therefore, the purpose of this study is to study the effectiveness of Thai traditional massage in improving constipation. The purpose of this study is to study the satisfaction with the treatment of chronic constipation and explore the treatment options for chronic constipation.

Methodology

Study design

This study is a one group study design, clinical trial in patients with chronic constipation.

Population and sample size

30 volunteers with Rome III chronic constipation.

Data collection

The researcher developed the assessment to study the Thai traditional massage efficacy for chronic constipation at Institute of Thai-Chinese Traditional Medicine, Mae Fah Luang University. The instrument used to measure results is a data record and data were compared before and after the experiment and then imported into the statistical analysis program IBM SPSS STATISTIC 21.

Operating area

Institute of Thai-Chinese Traditional Medicine 2nd floor, Department of Orthopedic and Sports Medicine

Mae Fah Luang University, Chiang Rai and there were 30 research participants.

Population size

Thirty volunteers with publicized constipation (Dan-lom) were interested in participating in the study.

Inclusion criteria

1. People aged 20 - 45 years.
2. Male or female.
3. People with constipation by Rome III criteria have 2 or more symptoms for more than 3 months.
4. History taking and physical examination to diagnose constipation that is not caused by mechanical obstruction or from other causes such as cancer (examined by a modern physician).

Exclusion criteria

1. Pregnant or breastfeeding women.
2. Patients with Hemiplegia or Paresis.
3. Contagious skin diseases such as chickenpox, shingles, contagious leprosy, etc.
4. Volunteers cannot communicate, understand or follow instructions.
5. Fever higher than 38.5 °C or menstruation on the day of treatment participation.
6. Uncontrolled high blood pressure (Uncontrolled hypertension) blood pressure is greater than 170/90 mmHg.
7. There is thrombosis. and clots with blood clots (Thrombophlebitis).
8. Taking anticoagulant drugs such as Aspirin, Clopidogrel, Prasugrel, Ticlopidine, etc.
9. Patients who treat constipation with medication.
10. Haven't taken antibiotics in the past 3 months.

Discontinuation criteria

1. Cardiovascular system abnormalities, such as chest pain, etc., or urinary system abnormalities such as Dysuria and Hematuria, etc.
2. A medical condition that develops during research is found to be life-threatening if it is still in the research process and is not treated.
3. Failure to comply with research rules or fail to follow up as scheduled.
4. The volunteers want to withdraw from the research project.
5. How to reach volunteers, such as inviting doctors or nurses, or placing advertisements.

Research tool

The instruments used in this research consist of 2 parts: research tools and tools used to collect data.

Methodology

The experimental group consisted of 30 people treated according to the traditional Thai medical practice guidelines, consisting of Thai traditional massage and herbal compress.

Treatment evaluation

The experimental group will be assessed using a record of excretion behavior, constipation before and after treatment, adverse reactions and assessed for their satisfaction with the treatment in terms of quality of service, quality of treatment, and overall satisfaction. After completing the study.

Outcome measurement

A questionnaire to assess the excretion behavior of the volunteers to assess the severity of the constipation of the volunteers.

Statistical methods for data analysis

1. Analyze general data using descriptive statistics, including mean and standard deviation of volunteers.
2. Data used for comparative testing, Intention to treat analysis with one-way ANOVA repeated measurement.
3. Analyze the results of each indicator Comparison between before the start of the experiment and after the experiment using paired-samples t-test statistics.

Results

From data analysis, it was found that most of the research participants were women. The most aged between 21-25 years and single status. Occupation of most of the students. Have had chronic constipation for 1-3 years, most of them. Most of the family members had no history of constipation. Most of the meat was eaten. The food tastes were mostly sweet, followed by salty flavor, spicy, and sour taste. The frequency of eating fatty foods Most were 3–5 times/week. Stress, most of them had sometimes to stress. Sleep soundly most of them sleep soundly sometimes. Most of them liked to eat salty food. Drinking tea and coffee, most of them drank sometimes (Table 1).

From data analysis, it was found that after the experiment defecation and urination behavior are better. Reduce the use of laxatives (Table 2).

Table 1 shows the general information of the samples

Sample group	(n=30) %	$\bar{X}$ (S.D.)
Gender		1.63(0.49)
Male	11(36.7)	
Female	19(63.3)	
Age (years)		4.9(0.30)
16-20 years	14(46.7)	
21-25 years	16(53.3)	
Status		1(0.00)
Single	30(100)	
Religion		6.86(0.83)
Buddhism	29(96.7)	
Christianity	1(3.3)	
Occupation		1.62(0.48)
Personal business/ trade	3(10.0)	
Student	27(90.0)	
Have had chronic constipation for a long time (years)		1.10(0.31)
1-3 years	25(83.3)	
4-6 years	2(6.7)	
7-9 years	3(10.0)	
Family history of constipation		6.86(0.83)
Yes	5(16.7)	
No	25(83.3)	
Eating behavior		2.0(0.00)
Meat	30(100)	
Food taste		1.53(0.86)
Sweet	19(63.3)	
Salty	8(26.7)	
Sour	1(3.3)	
Spicy	2(6.7)	
The frequency of eating fatty food		2.23(0.43)
3-5 times/week	23(76.7)	
Everyday	7(23.3)	
Stress		2.33(0.47)
Sometimes	20(66.7)	
Regularly	10(33.3)	
Sleep soundly		2.23(0.43)
Sleep soundly sometimes	23(76.7)	
Sleep soundly every night	7(23.3)	
like to eat salty food		1.90(0.40)
Yes	25(83.3)	
No	5(13.3)	
Drink tea and coffee		1.96(0.41)
No	3(10.0)	
Sometimes	25(83.3)	

Table 2 Shows a study on the effectiveness of Thai traditional massage in improving constipation in before and after the experiment.

Excretion behavior	Before experiment		After experiment	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.
Defecation	2.30	0.70	1.70	0.79
Urination	1.43	0.72	1.80	0.76
Use of laxatives	1.56	0.50	1.66	0.47

Table 3 Shows the results of a comparative study on the effectiveness of Thai traditional massage in improving constipation before and after the experiment.

Defecation characteristics	Before experiment		After experiment		df	t	P-value
	$\bar{X}$	S.D.	$\bar{X}$	S.D.			
Number of times of defecation	1.60	0.81	1.43	0.85	58	0.77	0.443
Difficulty in defecation	3.36	1.12	2.70	0.91	58	2.51	0.015*
Inability to defecate	3.23	1.04	2.70	1.02	58	2.00	0.050
Abdominal pain during defecation	3.00	1.01	2.16	0.91	58	3.34	0.001*
The time to use defecate	1.80	0.92	1.76	1.00	58	0.13	0.894
Use of laxatives or manual maneuvers to facilitate defecations.	2.00	0.58	1.83	0.83	58	0.89	0.375

* Statistically significant at p-value < 0.05

From data analysis, it was found that the researcher's participants were able to excrete within 1 day of experiment (Table 4).

Table 4 Shows the results of a comparative study on the effectiveness of Thai traditional massage in improving constipation before and after the experiment.

Date of first defecation	N	Percent
Day 1	23	76.7
Day 2	6	20.0
Day 3	1	3.3

From data analysis, it was found that most of them did not experience any adverse reactions. (Table 5).

Table 5 Shows the adverse reactions after the trial of Thai traditional massage in improving constipation.

The adverse reactions	N	Percent
Nausea		
Yes	2	6.7
No	28	93.3
Dizziness		
Yes	4	13.3
No	26	86.7
Loss of appetite		
Yes	7	23.3
No	23	76.7
Stomachache		
Yes	6	20.0
No	24	80.0
Pain from massage		
Yes	7	23.3
No	23	76.7
Burn after herbal compress		
Yes	0	0

From data analysis, it was found that after the experiment the researcher's participants had better defecation characteristics, especially the difficulty in defecation and abdominal pain during defecation were statistically significant at p-value < 0.05 (Table 6).

Table 6 Shows the results of the satisfaction assessment.

Assessment	Thai traditional massage		Satisfaction level
	$\bar{X}$	S.D.	
Quality of service	4.55	0.59	Strongly satisfied
Quality of treatment	4.55	0.59	Strongly satisfied
Overall satisfaction	4.63	0.51	Strongly satisfied
Total	4.55	0.59	Strongly satisfied

Discussion

From a research study on the effectiveness of Thai traditional massage on the treatment of chronic constipation. It was found that the participants in the study had better stool excretion. Decreased use of laxatives There is an increase in the number of defecation times. Decreased difficulty in defecation. Decreased incontinence symptoms. Abdominal pain during defecation decreased. Less time spent driving and the use of drugs or procedures was reduced. Past studies have shown that massage can help loosen muscle contractions in the gastrointestinal tract, thereby improving the digestive system. And the functioning of the intestines is efficient including being able to drive fluently and more time [9]. Thai traditional massage has a good effect on stimulating the frequency of excretion. Thus, it was concluded that Thai traditional massage was effective in treating chronic constipation. and suitable for treatment [10] The researcher's participants were able to pass bowel movements within day 1 of

treatment 76.7%, followed by day 2, 20.0% and day 3, 3.3%. The most of researcher's participants did not experience any adverse reactions after treatment. Some researcher's participants had nausea, 6.7%, dizziness, 13.3%, loss of appetite, 23.3%, stomachache, 20.0%, pain from massage 23.3%. Gastrointestinal decrease similar to the results of a past research study [11].

Conclusion

The conclusion of the research indicated that the Thai traditional massage was effective in treating constipation. Observed from defecation behavior before and after treatment, but massage can be dangerous, if the therapist is not properly trained. Treatment should only be done by a registered and licensed practitioner such as a practitioner of Thai traditional and applied Thai traditional medicine.

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