

AN AYURVEDIC MANAGEMENT OF CHRONIC CONSTIPATION: A CASE STUDY USING TOODA TWAK (MORUS INDICA GRIFF.) AND KARANJA PATRA (PONGAMIA PINNATA)

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ABSTRACT

Constipation is a gastrointestinal issue affecting 22% of Indian adults, suffer from constipation with 13% experiencing severe constipation, and 6% having constipation associated with other conditions (According to an Abbott India survey). In ayurveda constipation is described *Vibandha /Malasthambha*. *Vibandha* is an unhealthy condition explained as a symptom in many of the diseases as *Arshas*, *Udara Roga* etc. This case study reports on a 40 year old male patient with five years history of constipation, treated with *Tooda Twak Churna* and *Karanja Patra Churna* for 45 days followed by 15 days of drug free follow up. Significant relief was found in the signs and symptoms after 45 days of internal medications, demonstrating efficacy of this ayurveda combination in managing chronic constipation.

KEYWORDS: *Ayurveda, Vibandha, Chronic Constipation, Tooda Twak, Karanja Patra.*

INTRODUCTION

Constipation is a common issue that can cause discomfort. According to an Abbott India survey, 22% of Indian adults suffer from constipation. Of those, 13% experience severe

constipation, and 6% have constipation associated with other conditions.^[1] Constipation is a condition in which the person may have: fewer than three bowel movements a week, stools that are hard, dry, or lumpy, stools that are difficult or painful to pass and a feeling that not all stool has passed. A patient's perception of constipation may include not only the objective observation of infrequent bowel movements but also the subjective complaints of straining at stooling, incomplete evacuation, abdominal bloating or pain, hard or small stools, or a need for digital manipulation to enable defecation.^[2]

Constipation is regarded in Ayurveda as a manifestation of an imbalance in the Vata dosha, which governs movement and elimination in the body. It is an unhealthy condition explained as a symptom in many of the diseases as *Arshas*, *Udara Roga* etc.^[3] *Pratiloma Gati* of *Apana Vayu* causes *Udavarta* symptoms including *Anaha*, *Adhmana*, and *Malaavastamba*, which mirror the signs of *Vibandha* (constipation).^[4] References are given in the *Samhitas* regarding *Vibandha* which is mentioned under *Vataja Nanatmaja Vyadhis*.^[4] It is a condition where the stools are hard and passed with difficulty by straining and also incomplete bowel evacuation leading to bloating and abdominal discomfort.

Many drugs have been mentioned to relieve *Vibandha* in the classical ayurvedic texts, of which, *Tooda Twak* (bark of *Tooda*) is one such drug. Even though it is mentioned in many Ayurvedic texts, it is not in the streamline in present pharmaceutical manufacturing unit.

CASE REPORT

Patient information

A 40-year-old male patient was consulted in the outpatient department of Sri Sri Ayurveda Hospital, Bengaluru, complained of altered bowel movements (2-3 times per week), feeling of incomplete evacuation and frequent bloating and reduced appetite for 5 years and increased in the last 1 year. He tried taking many remedies for the same but when he did not get any relief, he came to our hospital with no history of Diabetes mellitus or Hypertension or any other major health issues and no surgical history. All the vitals and systemic examination were within the normal limits.

Personal history

Appetite: Decreased

Food: Vegetarian, Irregular

Sleep: Sound

Bowel: not clear, 2-3 times / week

Micturition: normal

Addiction: NIL

Family history: NIL

Surgical history: NIL

Clinical findings

Local examination	On inspection- no redness, no scars On palpation - Soft, tenderness present at left ileac region Size - normal Shape - normal
Per abdomen	On percussion – tympany On auscultation- normal bowel sounds heard
Systemic examination	No abnormalities in Nervous system, respiratory system and cardiovascular system

Table 1: Ashta Vidha Pareeksha.

<i>Nadi</i>	<i>72bpm</i>
<i>Mala</i>	<i>Vikruta</i>
<i>Mutra</i>	<i>Prakruta</i>
<i>Jihva</i>	<i>Lipta</i>
<i>Shabda</i>	<i>Prakruta</i>
<i>Sparsha</i>	<i>Prakruta</i>
<i>Druk</i>	<i>Snigdha</i>
<i>Akruti</i>	<i>Madhyama</i>

DIAGNOSTIC CRITERIA

There is constipation if patients who do not take laxatives report at least two of the following in any 12-week period during the previous 12 months (the Rome Criteria)

Table 2: The Rome Criteria.^[5]

Fewer than three bowel movements (BMs) per week	+
Hard stool in more than 25% of BMs	-
A sense of incomplete evacuation in more than 25% of BMs	++
Excessive straining in more than 25% of BMs	+
A need for digital manipulation to facilitate evacuation	-

ASSESSMENT CRITERIA

Table 3: Constipation Scoring System (Minimum Score 0; Maximum Score 30).^[6]

	Score
	Before treatment
Frequency of bowel movements	

1-2 times per 1-2 days	
2 times per week	2
Once per week	
Less than once per week	
Less than once per month	
Difficulty painful evacuation effort	
Never	
Rarely	
Sometimes	3
Usually	
Always	
Completeness feeling incomplete evacuation	
Never	
Rarely	
Sometimes	
Usually	
Always	4
Pain: abdominal pain	
Never	
Rarely	
Sometimes	
Usually	4
Always	
Time: minutes in lavatory per attempt	
Less than 5	
5-10	
10-20	3
20-30	
More than 30	
Assistance: type of assistance	
Without assistance	
Stimulative laxatives	2
Digital assistance or enema	
Failure: unsuccessful attempts for evacuation per 24 hours	
Never	
1-3	
3-6	3
6-9	
More than 9	
History: duration of constipation (years)	
0	
1-5	
5-10	3

10-20	
More than 20	
Total score	23

Treatment protocol

Table 4: Details of the internal medications.

Dravya	Anupana	Matra	Avadhi
Tuta bark churna + karanja patra churna (in equal quantity)	Water	5gms per day ½ tsp -0- ½ tsp	45 days

Follow up – 15th day, 30th day, 45th day

Drug free follow up – 15 days



Image 1: a. Toota twak b. karanja patra c. karanja patra (dried) d. toota twak and karanja patra churna.

RESULTS

Table 5: constipation scoring system – Day wise comparison.

	Score	Score	Score	Score
	Day 0	Day 15	Day 30	Day 45
Frequency of bowel movements				
1-2 times per 1-2 days			1	1
2 times per week	2	2		
Once per week				
Less than once per week				
Less than once per month				
Difficulty: painful evacuation effort				
Never			1	1
Rarely		2		
Sometimes	3			
Usually				
Always				
Completeness: feeling incomplete evacuation				
Never				
Rarely				2
Sometimes		3	3	
Usually	4			
Always				
Pain: abdominal pain				
Never				
Rarely			2	2
Sometimes	4	3		
Usually				
Always				
Time: minutes in lavatory per attempt				
Less than 5			1	1
5-10	3	2		
10-20				
20-30				
More than 30				
Assistance: type of assistance				
Without assistance		1	1	1
Stimulative laxatives	2			
Digital assistance or enema				
Failure: unsuccessful attempts for evacuation per 24 hours				

Never			1	1
1-3	3	2		
3-6				
6-9				
More than 9				
History: duration of constipation (years)				
0				
1-5				
5-10	3	3	3	3
10-20				
More than 20				
Total score	23	18	13	12

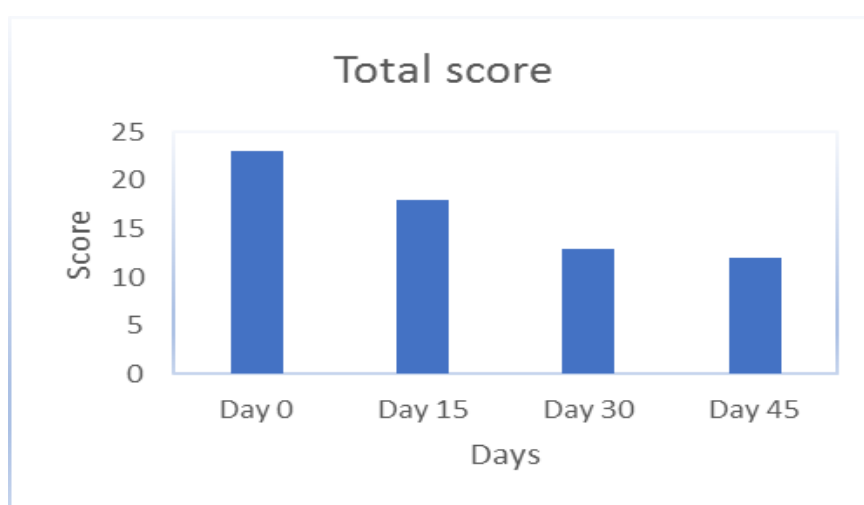


Image 2: Graphical representation of the results.

Graphical representation of the results, where constipation score and days are plotted on y and x axis respectively. The constipation scores are decreasing with the increase in days (every 15 days interval) suggesting there was improvement in the symptoms.

DISCUSSION

Table 6: Details of the herbs used.

Sl no	Dravya	Botanical name	Family	Phyto chemicals
1.	<i>Tooda</i>	<i>Morus indica</i>	Moraceae	Flavonoids: Anthocyanins, quercetin, kaempferol, and rutin. Phenolic acids: Chlorogenic acid, caffeic acid, and gallic acid
2.	<i>Karanja</i>	<i>Pongamia glabra</i>	Leguminaceae	Karanjin, Furanoflavanoids, Pongachromene, Isoflavonoid glycosides, Rotenoids,

Tooda Twak, having *Madhura* and *Amla Rasa*, *Snigdha*, *Kleda Guna* and *Vatanuloma karma* of *Madhura* and *Amla Rasa*,^[7] *Sara Guna* of *Tooda Twak*.^[8] helps in relieving *Vibandha*.

Karanja Patra, having *Katu Rasa*, which does *Sputikarana* of *Indriyas* and does *Marga Vivrana*^[9] thereby helping in clearing the *Avarodha* in the *marga* and it also has *Bhedana Karma* which all together helps in relieving *Vibandha*.

As *Tooda Twak* is rich in flavonoids and flavonoid's action on GIT is to modulate the secretion of gut hormones to regulate and balance the gut microbiota and relaxes the precontracted intestinal smooth muscles.^[10] may help in easy evacuation of bowel and reducing the abdominal pain and distension.

The bark of mulberry branches, with 30% cellulose, source of natural fibers.^[11] and these Fiber plays a key role in preventing and relieving constipation by adding bulk to stool, making it softer and easier to pass through the digestive tract due to its ability to absorb water and increase stool size, essentially facilitating bowel movements by stimulating gut motility

Karanjin is a phytoconstituent which is present in *karanja* which is a proven gastroprotective and anti-inflammatory and is helping in easy evacuation, reducing distension and there- by helping in relieving constipation.^[12] *Karanja patra* consists of 7% fibres which again helps in adding bulk to the stool and easy evacuation.

CONCLUSION

Constipation is a debilitating disorder that can trigger a cascade of diseases. Fortunately, Ayurvedic management offers a promising solution. The combination of *Tooda Twak* and *Karanja Patra* has shown to be effective in alleviating constipation. In this case report, a patient with chronic constipation experienced significant relief from symptoms such as bloating, abdominal pain, and incomplete evacuation, as well as reduced time spent in the lavatory. The combination of *Tooda Twak Churna* and *Karanja Patra Churna* proved to be a highly effective treatment.

FURTHER SCOPE OF STUDY

While this case study demonstrates the potential of Ayurvedic management in treating constipation, further research is needed to confirm these findings with a larger-scale study involving a greater number of participants providing more comprehensive insights into the efficacy of this treatment approach.

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