

Therapeutic Efficacy of Mrudvika (*Vitis vinifera* Linn.) in Malavibandha: A Single Case Study.

ABSTRACT:

Background: *Malavibandha* (constipation) is one of the most common gastrointestinal complaints seen in day-to-day practice and is largely a result of poor dietary habits, physical inactivity and disturbed sleep. In Ayurveda, *Mrudvika* (*Vitis vinifera* Linn.) is described as a *sara* and *anulomaka dravya* that helps in easy evacuation of stool. Aim: To study the therapeutic effect of *Mrudvika* (*Vitis vinifera* Linn.) in a patient of *Malavibandha*. Case Presentation: A 30-year-old male presented with reduced frequency of defecation, hard stool and intermittent straining for 25 days. He was treated with 10 gm of *Mrudvika* (*Vitis vinifera* Linn.) soaked overnight in 200 ml water and consumed on an empty stomach in *Pragbhakta kala* (before the morning meal), once daily for 30 days. Assessment was carried out before treatment, on the 16th day (follow up) and on the 31st day (after treatment) using frequency grading, the Bristol Stool Form Scale and a pain-during-defecation grading scale. Result: Mild improvement was observed in stool consistency and complete relief in pain during defecation, while the frequency of bowel movements remained largely unchanged. No adverse effects were reported. Conclusion: *Mrudvika* (*Vitis vinifera* Linn.) being a simple, safe and cost-effective dietary substance, showed a mild but encouraging effect on *Malavibandha* in this case. Further study on a larger sample is required to draw a statistically valid conclusion.

Keywords: *Malavibandha*, *Mrudvika*, *Vitis vinifera*, Constipation, Ayurveda, Case Study

INTRODUCTION

Swasthavritta is the branch of Ayurveda dedicated to the maintenance of health and the prevention of disease. According to Acharya Sushruta, a person is considered healthy (swastha) when the *doshas*, *agni*, *dhatu* and *mala* are in a state of equilibrium, along with a sense of mental, sensory and spiritual well-being [1].

In present times, an increasing number of people suffer from irregular or difficult defecation because of poor lifestyle habits. *Apravrutti* or obstruction of *mala* is termed *Malavibandha* [2]; in the *AyurvediyaShabdakosh*, the term *Vibandha* itself is defined as *Apravrutti* [3]. *Malavibandha* has not been described as an independent disease in the classical texts but is mentioned as a symptom associated with *Grahini* [4], *Arsh* [5] and *Parikartika* [6], and is also described as an *Apatarpanjanya* disorder arising from nutritional deficiency [7].

Malavibandha occurs mainly due to vitiation of *Apana Vayu*, one of whose principal functions is the excretion of faeces and urine [8]; disturbance of this function leads to difficulty in defecation and also indicates a state of *Strotodushti* [9]. *Purisha* is considered the foundation of the body that supports *Agni* and *Vayu* [10]. Acharya Charaka further states that suppression of *Apana Vayu* and of the natural urge for defecation (*Purisha Vega*) can itself lead to *Malavibandha* [11]. The condition of the bowel, or *Koshtha*, is closely related to *Malavibandha*; Ashtanga Hrudaya describes four types of *Koshtha* based on the predominant *Dosha*: *Krura* (Vata), *Mrudu* (Pitta), *Madhyama* (Kapha) and *Sama* [12].

Considering these factors, substances that are *anulomaka*, *sara*, *snigdha* and *mrudu* in nature are useful in the management of *Malavibandha*. *Mrudvika* (*Vitis vinifera* Linn.) is described in Sushruta Samhita and Bhavprakash Nighantu as *sara*, *virechaka*, *swarya*, *madhura*, *snigdha* and *shitala* in nature [13,14]. It is *madhura rasa*, *madhura vipaka* and *shita virya* and, being cost-effective and easily available in daily life, was selected as the trial drug for the present case study.

AIM AND OBJECTIVE

To study the therapeutic efficacy of *Mrudvika* (*Vitis vinifera* Linn.) administered in Pragbhakta kala for 30 days, in a patient suffering from *Malavibandha*.

CASE REPORT

A 30-year-old male patient presented to the OPD with the chief complaint of difficulty in passing stool since 25 days, associated with reduced frequency of defecation, hard stool, and on-and-off straining during defecation. There was no history of any major illness in the past, and no significant family history of similar or other chronic disease. His dietary history revealed a mixed diet with non-vegetarian food consumed once a week.

Ashtavidha Parikshan:

Nadi – Vata Kaphaja (78/min)

Mala - Malavibandha

Mutra - Niyantrit

Jivha - Saam

Drika - Prakrit

Sparsha - Samshitoshna

Shabda - Spashta

Aakriti – Madhyama

On further examination of Koshtha and Agni it was found as follows:

Koshtha - Krura

General and systemic examination and all vital parameters were within normal limits.

MATERIALS AND METHODS

Source of case: This case was drawn from an ongoing exploratory clinical trial being conducted in the *Swasthyarakshan* OPD of an Ayurveda hospital, after obtaining informed written consent from the patient.

Drug: Organic, authenticated *Mrudvika* (*Vitis vinifera* Linn.)

Diagnostic criteria: *Malavibandha* was diagnosed as per the Rome IV criteria given by the Rome Foundation [15].

Selection criteria:

A. Inclusion Criteria

1. Patients having *Malavibandha* lakshana such as mala pravrutti with difficulty, hard stool and other symptoms as per the diagnostic criteria for less than 1 month.
2. Patients of age group 25-50 years.

B. Exclusion Criteria

1. *Malavibandha* due to secondary causes.
2. Patients with malignant disease and chronic illness
3. Patients having *Malavibandha* as a result of disease like *Grahini*, *Arsh*, *Parikartika*.
4. In pregnancy and lactation.
5. Patients with pre diagnosed diabetes.

C. Withdrawal criteria-

1. During study if any patient develops any complication.
2. Patients not providing proper follow ups were withdrawn from the study.

Dose and mode of administration: 10 gm of *Mrudvika* soaked overnight in 200 ml of water, the soaked fruit to be consumed on an empty stomach in *Pragbhakta kala* (before the morning meal), once daily for a duration of 30 days.

Assessment criteria:

Assessment was done on the basis of frequency of defecation (Grade 0–3), consistency of stool as per the Bristol Stool Form Scale [16], and pain during defecation (Grade 0–3), recorded before treatment, on the 16th day (follow-up) and on the 31st day (after treatment).

Table 1: Frequency of defecation

Sr. No.	Frequency	Grade
1	1–2 times / day	0
2	3–4 times / week	1
3	2–3 times / week	2
4	Less than 1 time a week	3

103 Table 2: consistency of stool as per the Bristol Stool Form Scale

Type	Description	Clinical Category
Type 1	Separate hard lumps, like nuts (hard to pass)	Severe Constipation
Type 2	Sausage-shaped but lumpy	Mild Constipation
Type 3	Like a sausage but with cracks on its surface	Normal
Type 4	Like a sausage or snake, smooth and soft	Normal
Type 5	Soft blobs with clear-cut edges (passed easily)	Lacking Fibre
Type 6	Fluffy pieces with ragged edges, a mushy stool	Mild Diarrhea
Type 7	Watery, no solid pieces; entirely liquid	Severe Diarrhea

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105 Table 3: Pain While Defecation:

Sr. No.	Symptoms	Grade
1	No pain	0

2	Mild	1
3	Moderate	2
4	Severe	3

Treatment given: The patient was advised to take 10 gm of *Mrudvika* soaked overnight in 200 ml of water, to be consumed on an empty stomach before the morning meal (*Pragbhakta kala*), once daily, for 30 days. No other medication or dietary restriction was advised.

OBSERVATIONS AND RESULTS

The patient was assessed at three time points before treatment (BT), on the 16th day of treatment (follow-up), and on the 31st day, i.e., after completion of treatment (AT). The findings are summarised in Table 4.

Table 4: Symptom scores before treatment, at follow up, and after treatment

Symptom	Before Treatment	Follow Up (Day 16)	After Treatment (Day 31)
Frequency (Grade 0-3)	Grade 1	Grade 1	Grade 1
Consistency of stool (Bristol Stool Scale)	Type 2	Type 2	Type 3

Pain during defecation (Grade 0-3)	Grade 1	Grade 1	Grade 0
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On follow-up on the 16th day, no significant change was noted in any of the three parameters. By the 31st day, a mild improvement was observed the consistency of stool improved from Bristol Type 2 (hard, lumpy) to Type 3 (softer, cracked surface), and pain during defecation resolved completely (Grade 1 to Grade 0). However, the frequency of defecation remained unchanged throughout the treatment period. No adverse effect or complication was reported by the patient during or after the course of treatment.

DISCUSSION

Mrudvika (*Vitis vinifera* Linn.) is *madhura* in *rasa* and *vipaka*, *shita* in *virya*, and possesses *mrudu* and *snigdha* guna, along with *sara* property [13,14]. These qualities are opposite to the *ruksha*, *khara* and *laghu* attributes of aggravated Vata that are chiefly responsible for the hardness of stool and difficulty in defecation seen in *Malavibandha*. The *snigdha* and *sara* properties of *Mrudvika* are believed to lubricate and soften the stool and support smooth evacuation, which may explain the improvement in stool consistency and pain during defecation seen in this case.

The frequency of bowel movements, however, did not change in this patient. This could possibly be related to his *Krura Koshtha* and *Vishama Agni*, both of which reflect a more Vata-dominant constitution that may need either a longer duration of treatment, a higher dose, or additional Vata-pacifying measures for a complete resolution of all symptoms. Since this is a single case, the observation cannot be generalised, and the mild response seen here should be interpreted with caution.

This finding is in agreement with the classical description of *Mrudvika* as an *Anulomaka* and *Sara dravya* useful in disorders of *Vibandha*, and supports the rationale for evaluating it further in a larger sample as part of the ongoing exploratory clinical trial.

CONCLUSION

In this case, administration of 10 gm of *Mrudvika* in *Pragbhaktakala* for 30 days produced a mild but favourable effect on *Malavibandha*, particularly in the form of softer stool consistency and complete relief from pain during defecation, without any adverse effects. Being a simple, safe, palatable and cost-effective dietary substance, *Mrudvika* appears to be a promising option for the management of *Malavibandha*. Further study on a larger sample size is warranted to arrive at a statistically valid conclusion regarding its efficacy.

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