

## REVIEWER'S REPORT

Manuscript No.: IJAR- 58582

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

### Recommendation:

Accept after minor revision

| Rating         | Excel. | Good | Fair | Poor |
|----------------|--------|------|------|------|
| Originality    |        | ✓    |      |      |
| Techn. Quality |        |      | ✓    |      |
| Clarity        |        |      | ✓    |      |
| Significance   | ✓      |      |      |      |

Reviewer's ID: Bilqees Hamza

### Detailed Reviewer's Report

The manuscript presents a single case report evaluating the therapeutic potential of *Mrudvika* (*Vitis vinifera* Linn., commonly known as raisin/grape) in managing *Malavibandha* (constipation). The study follows a 30-year-old male patient exhibiting a 25-day history of reduced defecation frequency, hard stool, and intermittent straining. The intervention involved administering 10 grams of overnight-water-soaked *Mrudvika* daily on an empty stomach (*Pragbhakta kala*) over a 30-day period. Clinical outcomes were evaluated at baseline, day 16, and day 31 using three standard parameters: frequency of defecation, stool consistency via the Bristol Stool Form Scale (BSFS), and pain during defecation.

The reported results indicate a modest therapeutic benefit. Stool consistency improved from Bristol Type 2 (lumpy/hard) to Type 3 (sausage-shaped with cracks), and defecation pain resolved completely (Grade 1 to Grade 0). However, the frequency of defecation remained unchanged (Grade 1; 3–4 times/week) throughout the intervention. The authors conclude that *Mrudvika* acts as a gentle, safe, and cost-effective dietary intervention for symptom mitigation in mild constipation, though broader clinical trials are needed to validate efficacy.

While the paper is well-conceived, logically structured, and clinically relevant to preventive Ayurvedic healthcare (*Swasthavritta*), several methodological, reporting, and textual areas require refinement to enhance scholarly rigor.

Suggestions for Improvement

## REVIEWER'S REPORT

### 1. Abstract and Keywords

- The abstract succinctly covers the essential case details, but it should explicitly mention the specific parameters evaluated on the Bristol Stool Form Scale (Type 2 to Type 3) to provide quantitative clarity in the summary.
- The keywords are relevant, but ensure consistency with standardized Medical Subject Headings (MeSH) where applicable (e.g., *Vitis*, *Constipation*, *Ayurveda*, *Case Reports*).

### 2. Methodological Clarifications and Diagnostic Criteria

- **Rome IV Criteria Details:** In the Materials and Methods section, the authors state that diagnosis was established using the Rome IV criteria. However, Rome IV criteria for Functional Constipation typically specify symptom onset at least 6 months prior to diagnosis with criteria met for the last 3 months. Since this patient had a history of only 25 days, the authors should clarify whether this meets the criteria for *acute/subacute constipation* or adjust the terminology to avoid confusion regarding standard Rome IV definitions.
- **Preparation and Administration Protocol:** The protocol mentions 10 g of *Mrudvika* soaked in 200 ml water. Clarify whether the patient consumed only the soaked fruits, or both the fruits and the water in which they were soaked, as water-soluble dietary fiber and active compounds (like tartaric acid and natural sugars) leach into the soaking medium.

### 3. Reporting and Diagnostic Framework (Ayurvedic Assessment)

- **Baseline Diagnostic Parameters:** The authors present baseline *Ashtavidha Pariksha*, *Koshtha* (Krura), and *Agni* (Vishama). To strengthen the Ayurvedic clinical reasoning, include a short discussion on how *Krura Koshtha* and *Vishama Agni* influence the duration or potency required for *Anulomana* therapy.
- **CARE Guidelines Adherence:** As a case report, the manuscript should closely align with the CARE (CAse REport) guidelines. Adding a brief timeline figure outlining the chronological milestones (onset, presentation, intervention, follow-ups, and outcome) would significantly improve visual presentation.

### 4. Discussion Section Enhancements

- **Pharmacological & Phytochemical Mechanism:** The discussion attributes the observed effects to the *Rasa* (Madhura), *Virya* (Shita), *Guna* (Snigdha, Mrudu), and *Sara/Anulomaka* properties of *Mrudvika*. To bridge traditional Ayurvedic pharmacology with modern biomedical mechanisms, the authors should incorporate a brief discussion on the nutritional/biochemical constituents of *Vitis vinifera*—such as dietary fiber content, tartaric acid, organic acids, and phenolic compounds—and their osmotic/prokinetic effects on colonic transit and stool hydration.

## REVIEWER'S REPORT

- **Limitations:** The discussion appropriately acknowledges the single-case design and patient-specific variables (*Krura Koshtha*). Expand slightly on other unmeasured confounding factors, such as daily fluid intake variations, physical activity changes, or dietary fiber fluctuations during the 30-day period.

### 5. Formatting, References, and Editorial Clean-up

- **Reference Formatting:** Ensure strict uniformity across all bibliographic references. References 1, 2, 4–14 follow traditional Sanskrit text citation formats, but references 15 and 16 should be consistently styled according to standard Vancouver or ICMJE formats.
- **In-Text Typography:** Remove stray header text or watermark lines embedded in the draft text (e.g., "IDER PEER REVIE", "UNEPEER REVIE", "UNDER PEER REVIEW IN IJAR").
- **Table Captions:** Ensure table titles follow consistent capitalization and formatting across Tables 1 through 4.

### Recommendation to the Editor

**Decision:** Accept with Minor Revision

### Recommendation Text:

The manuscript titled "Therapeutic Efficacy of Mrudvika (*Vitis vinifera* Linn.) in Malavibandha: A Single Case Study" provides a clear and practical clinical evaluation of a traditional Ayurvedic dietary intervention for constipation. The clinical documentation is objective, and the authors present balanced results without overstating the efficacy of the single-drug therapy. The manuscript is suitable for publication after minor revisions. The authors should address the discrepancy regarding Rome IV duration criteria versus the 25-day symptom onset, clarify whether the soaking water was ingested alongside the fruit, integrate modern phytochemical explanations for *Vitis vinifera*'s laxative effect, and clean up minor formatting artifacts.