



ROLE OF LAJA MANDA IN THE MANAGEMENT OF DEHYDRATION FROM AYURVEDIC AND MODERN PERSPECTIVE.

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ABSTRACT

Dehydration is a common clinical condition caused by excessive fluid loss due to diarrhea, vomiting, fever, or inadequate fluid intake, leading to disturbances in fluid and electrolyte balance. Although Oral Rehydration Solution (ORS) is the standard treatment for dehydration, Ayurvedic dietary formulations may provide additional benefits by supporting digestion and recovery. Laja Manda, a classical Pathya Kalpana prepared from parched paddy (Laja) and water, is described in Ayurvedic texts for the management of conditions such as Atisara (diarrhea), Jwara (fever), Chhardi (vomiting), and Trishna (thirst). The present review aims to evaluate the role of Laja Manda in the management of dehydration from both Ayurvedic and modern perspectives. Relevant literature was collected from classical Ayurvedic texts and contemporary scientific sources. Ayurvedically, Laja Manda possesses Laghu, Deepana, Grahi, and Trishna-shamaka properties that help restore Rasa Dhatu, improve digestive function, and alleviate thirst. From a modern perspective, its starch content provides a source of glucose that facilitates intestinal water absorption and supports hydration. Due to its light and easily digestible nature, it is particularly suitable for debilitated individuals and patients recovering from gastrointestinal disorders. Laja Manda is a simple, economical, and nutritionally supportive formulation that combines hydration with digestive support. Although it cannot replace WHO-ORS in severe dehydration, it may serve as a useful dietary adjunct in mild to moderate dehydration and during the recovery phase. Further clinical studies are needed to validate its therapeutic efficacy and strengthen its evidence base in contemporary healthcare.

KEYWORDS : Laja Manda, Dehydration, Pathya Kalpana, Atisara, Oral Rehydration Therapy, Ayurveda.

INTRODUCTION

The ancient science of Ayurveda places strong emphasis on preventive healthcare and the maintenance of health, rather than solely focusing on disease treatment. Seasonal regimens, such as *Rtucaryā*, along with appropriate dietary habits (*Āhāra*), play a crucial role in achieving and preserving optimal health. Among the foundational pillars of life defined in Ayurveda, *Āhāra* is considered the most vital, hence referred to as *Mahābhaisajya*, or the supreme medicine^[1].

One of the unique contributions of Ayurveda is the concept of *Pathya Kalpanā*, which involves modifying the attributes of food substances (*Dravyas*) through specific processing methods (*Kalpanā*). These formulations are designed to maintain the proper functioning of the body's physiological systems (*Srotas*) while ensuring mental comfort^[2]. Substances or regimens that negatively affect the body and mind are classified as *Apathya*.

Ācārya Śārṅgadharma has elaborated various forms of *Pathya Kalpanā*, including *Manda*, *Peya*, *Vilēpi*, and *Yavāgu*^[3].

Dehydration refers to a condition where the body loses more fluids than it takes in, resulting in an imbalance of water and essential electrolytes. Clinically, dehydration presents with symptoms ranging from mild thirst and fatigue to severe complications such as confusion, hypotension, and multiple organ dysfunction.^[4]

Lajā Manda is characterised by *Laghu* (lightness), *Dīpan* (digestive stimulation), and predominance of the *Āpa Mahābhūta* (water element). These properties make it easy to digest, supportive to *Agni*, and effective in restoring *Drava Dhātus* such as *Rasa*, without disturbing digestion.^[5,6]

Among these, *Laja Manda*, a light and easily absorbable rice-based preparation, is ideal in early stages of digestive recovery, especially in dehydrated and debilitated

individuals. Its role in replenishing lost fluids and maintaining electrolyte balance aligns well with modern concepts of Oral Rehydration Therapy (ORT). *Krutanna varga* – It is one of the specialties of Ayurveda. It is group of *Pathyakara ahara* like *Manda*, *peya*, *vilepi*, *Yusha* etc. *20 Manda* is having *Sarvadhatusatmyakruta* property. These preparations can be employed in mild dehydration condition as a oral rehydration.

Need of Study

Dehydration is a common condition associated with diarrhea, vomiting, fever, and inadequate fluid intake. Although ORS is effective for fluid replacement, it does not address digestive impairment and nutritional depletion. *Laja Manda*, a classical Ayurvedic *Pathya Kalpana*, possesses *Laghu*, *Deepana*, and *Trishna-shamaka* properties that support hydration, digestion, and recovery. Despite its classical importance, scientific evaluation of its role in dehydration management remains limited. Therefore, this review aims to explore the therapeutic potential of *Laja Manda* from both Ayurvedic and modern perspectives and highlight its relevance in contemporary healthcare.

Aim

To evaluate the role of *Laja Manda* in the management of dehydration from Ayurvedic and modern perspectives.

Objectives

- To understand the concept of *Pathya Kalpana*.
- To review classical references of *Laja Manda*.

Review of Literature

This review explores the references related to *Pathya Kalpana*, dehydration-like conditions, and the specific use of *Laja Manda* in classical Ayurvedic texts, along with supportive insights from modern nutritional science.

All the literatures related to " *pathya kalpana* , *lajamand* and dehydration will be collected from *Brihatrayi*, *Laghutrayi* &

other classical text of Ayurveda. And the modern literature including recent advances in this field will also be review.

1. श्रुतानां शालीनां तण्डुलाः लाजाः॥^[7] (A.h 1-6/36)
2. तृष्णातीसारशमनो धातुसाम्यकरः शिवः । लाजामण्डोऽग्निजननो दाहमूत्राग्निवारणः॥२५४॥
मन्दाग्निविषमाग्नीनां बातरथविरयोषिताम् । देयश्च सुकुमाराणां लाजामण्डः सुसंस्कृतः॥२५५॥^[8] (ch.su 27/254-255)

DISCUSSION

Laja Manda is a classical Ayurvedic *Pathya Kalpana* prepared from *Laja* (parched paddy) and water. Classical texts describe it as *Trishnashamaka*, *Agnijanana*, *Dhatusamyakara*, *Daha-hara*, and *Atisara-hara*. These properties indicate its therapeutic relevance in conditions associated with fluid depletion, impaired digestion, and loss of strength. *Charaka* specifically recommends *Laja Manda* for children, elderly individuals, women, and debilitated patients because of its *Laghu* and easily digestible nature.

From an Ayurvedic perspective, dehydration can be understood as a condition involving *Drava Dhatu Kshaya*,^[9,10] *Rasa Dhatu* depletion, and aggravation of *Vata Dosha*. Symptoms such as thirst, weakness, dryness, dizziness,^[11] and fatigue resemble the manifestations of *Trishna* and depletion of body fluids described in classical texts. Due to the predominance of *Apa Mahabhuta*, *Laja Manda* helps replenish fluid loss, while its *Madhura Rasa* and *Tarpana* effect nourish tissues and alleviate excessive thirst. "Due to the predominance of *Apa Mahabhuta*, *Laja Manda* helps replenish fluid loss..." Simultaneously, its *Deepana* and *Pachana* properties support impaired digestive function, thereby preventing further deterioration of *Agni*.^[12]

Table No. 1 Preparation Method of Laja Manda

S.no	Parameter	Details (as per ayurvedic texts)
1.	Ingredients per Patient	Laja (parched paddy): 25 g - Water: 14 times (i.e., 350 ml)
2.	Method of Preparation	Mix laja and water in prescribed quantity. Heat gently until thin gruel (manda) is formed.
3.	Dose (Matra)	Not clearly mentioned in texts. Should be administered according to the patient's digestive capacity (<i>Agni bala</i>) – as per <i>Charaka</i> . [13,15]
4.	Time of Administration	Muhur muhur (frequently in small amounts), as it helps sustain Prana Vayu – recommended in <i>Charaka Samhita</i> that is prandharak. [14]

An important advantage of *Laja Manda* is that it combines hydration with digestive support. In many gastrointestinal disorders such as *Atisara*, *Chhardi*, and *Jwara*, dehydration is frequently associated with weakened digestion and poor appetite. While fluid replacement remains essential, restoration of digestive capacity is equally important for recovery. The *Deepana*, *Pachana*, and *Grahi* properties of *Laja Manda* may help improve intestinal function, promote nutrient assimilation, and reduce excessive fluid loss through stools.

Modern scientific understanding also supports several aspects of its therapeutic utility. *Laja Manda* contains easily digestible rice starch that is gradually converted into glucose during digestion. The presence of glucose facilitates sodium and water absorption through sodium-glucose^[16] co-transport mechanisms in the intestinal mucosa, a principle that forms the physiological basis of Oral Rehydration Therapy (ORT). Studies on rice-based rehydration solutions have demonstrated improved water absorption, reduction in stool output, and better intestinal recovery compared with conventional glucose-based formulations. These observations provide a possible scientific explanation for the

traditional use of *Laja Manda* in conditions associated with dehydration and diarrhea.

Furthermore, unlike standard ORS, which primarily focuses on electrolyte replacement, *Laja Manda* offers additional nutritional support through carbohydrates and trace nutrients. Its mild taste, easy preparation, low cost, and cultural acceptability further enhance its suitability as a dietary intervention, particularly in resource-limited settings and during the convalescent phase of illness.

The available evidence regarding *Laja Manda* is largely derived from classical Ayurvedic literature and theoretical nutritional correlations. Well-designed clinical studies evaluating its effects on hydration status, electrolyte balance, gastrointestinal recovery, and patient outcomes are limited. Future experimental and clinical research is required to establish standardized preparation methods, optimal dosage, and evidence-based therapeutic applications of *Laja Manda* in contemporary healthcare.

The comparative composition of WHO-ORS and *Laja Manda* suggests that while ORS is superior for rapid electrolyte correction, *Laja Manda* provides additional digestive and nutritional benefits, making it a useful supportive dietary intervention in mild to moderate dehydration.

Table No.2 Components of ORS and Lajmand.

S.no	Components	WHO ORS (per liter) [17]	Lajamand (per100g) [18]
1.	Sodium	3.5g (as Nacl)	2.34 mg
2.	Potassium	1.5g (as kcl)	1.73 mg
3.	Sodium bicarbonate	2.5g bicarbonate or 2.9g citrate	-
4.	Glucose	20 g	From starch (Indirect)
5.	Carbohydrates	20g	0.74 g
6.	Protein	-	0.33g
7.	Fats	-	0.14g
8.	Energy	~ 80 kcal	5.54 kcal
9.	Water	1000 ml	-

However, despite its promising therapeutic attributes, *Laja Manda* should not be considered a substitute for WHO-recommended ORS in severe dehydration...

The available evidence regarding *Laja Manda* is largely derived from classical Ayurvedic literature..

CONCLUSION

Laja Manda is a classical Ayurvedic *Pathya Kalpana* possessing *Laghu*, *Deepana*, *Grahi*, and *Trishna-shamaka* properties. It provides hydration, supports digestive function, and helps restore strength in conditions associated with fluid loss such as *Atisara*, *Chhardi*, and *Jwara*. The starch content of *Laja Manda* contributes to fluid absorption and nutritional replenishment, while its easy digestibility makes it suitable for debilitated individuals. Although it cannot replace WHO-ORS in severe dehydration, it can be considered a useful Ayurvedic dietary intervention for mild to moderate dehydration. Further clinical studies are required to establish its efficacy and strengthen its evidence base in integrative healthcare.

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