



Case Study

TO UNRAVEL AND EVALUATE THE EFFICACY OF *MADANADI GUDA VARTI* IN THE
MANAGEMENT OF CONSTIPATION

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Article info

Article History:

Received: 19-11-2023

Accepted: 11-12-2023

Published: 31-12-2023

KEYWORDS:

Madanadi Guda Varti, Constipation, Suppository.

ABSTRACT

The word constipation refers to the bowel movements that are infrequent or hard to pass, causing discomfort the individual. The stools are often hard, dry and small making them painful or difficult to pass. *Acharya Sushruta* has mentioned a special formulation called *Madanadi Guda Varti* in the context of *Udararoga Chikithsa* which has been lost with the passage of time and there are no references of its usage in modern times. The aim of this study is to evaluate the role of *Madanadi Guda Varti* in the management of constipation. **Methodology:** It is a case study of a 45 years old female patient who presented with the chief complaints of constipation with abdominal discomfort since 3 days. She was treated with the prepared *Madanadi Guda Varti*, a suppository, which was inserted per anus. **Results:** Complete evacuation of stools was achieved within 3 hours of insertion of the suppository. **Discussion:** Constipation is a common complaint and needs to be assessed irrespective of the specialties in medical practice. In this present case, *Madanadi Guda Varti* has shown promising results in the successful management of constipation with ease and is devoid of any complications. Further clinical studies are required to evaluate its effectiveness in larger sample.

INTRODUCTION

Constipation is a common gastrointestinal complaint in apparently healthy population as well as in patients with various predisposing disorders with approximately 12% to 19% global prevalence.^[1] Constipation is traditionally defined as three or fewer bowel movements per week. The word constipation refers to the bowel movements that are infrequent or hard to pass, causing discomfort the individual. The stools are often hard, dry and small making them painful or difficult to pass.^[2] Various drugs, including bulking agent, stimulants, stool softeners and osmotic agents are used in clinical practice depending on the severity and chronicity of the condition.^[3] Though the conventional treatment is well established and safe, it does not provide satisfying improvement for many patients prompting their interest in other therapeutic strategies.^[4]

Most frequently, laxative drugs are prescribed for the management of constipation, but these drugs are sometimes associated with unpleasant side effects such as diarrhoea, abdominal cramps, electrolyte imbalance, bloating, and abdominal distension.^[5] The use of complementary and alternative therapies, including Ayurveda, is frequently used for the treatment of numerous gastrointestinal ailments, including constipation.

Acharya Sushruta has mentioned a special formulation called *Madanadi Guda Varti* in the context of *Udararoga Chikithsa* which has been lost with the passage of time and there are no references of its usage in modern times. Numerous studies are done in the management of *Vibandha* with the internal medication, here an attempt to study the effect of *Madanadi Guda Varti* in the management of the same is taken. For this study, the drugs were procured from an authentic source and the *Varti* was prepared by the classical method and was stored in an air tight container and placed in the refrigerator.

Access this article online	
Quick Response Code	
	https://doi.org/10.47070/ijapr.v11i12.3067
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MATERIALS AND METHODS

Case study: It is a case study of a 45 years old female patient who presented with the chief complains of constipation with abdominal discomfort since 3 days. The patient was assessed using the nature of evacuation and feeling after defecation tools before and after treatment. This study was undertaken after obtaining an informed consent from the patient.

Intervention: Madanadi Guda Varti was prepared using the Choorna of Madanaphala, Kutaja, Jeemuthaka, Ikshwaku, Dhamarghawa, Trivrit, Pippali,

Maricha, Shunti, Sarshapa and Lavana in equal quantities and Bhavana was done with Gomutra, this paste was then filled in the Varti mould, air dried and the prepared Varti was stored in an air tight container. Each Varti weighed around 2.5gm and 1 of the prepared Varti was inserted into this patient per rectally.

Results: Complete evacuation of stools was achieved within 5 hours of insertion of the suppository. The assessment is done using the above mentioned tool and is mentioned below in the table (Table no 1 & 2).

Table 1: Showing the Assessment Before and After Treatment

Parameters	Scores	BT	AT
Easy evacuation	0		+
With mild stress	1		
Requires straining	2	+	

Feeling after defecation [6]

Table 2: Showing the Assessment Before and After Treatment

Parameters	Scores	BT	AT
Satisfied	0		+
Partially satisfied	1		
Dissatisfied	2	+	

DISCUSSION

Constipation is a common post-operative complaint and also it must be assessed regularly by all doctors of any specialties across the world. Numerous studies are done in the management of Vibandha with the internal medication, here an attempt to study the effect of Madanadi Guda Varti as a suppository was done. Concept of Vartis has been widely discussed in the classical texts of Sushruta Samhita, Charaka Samhita, Bhaishajya Kalpana, Sharangdhara, Madhava Nidana and many more which helps us understand the significance of Varti and its importance in rectal route of administrating drugs.

In the present case Madanadi Guda Varti has shown promising results in the successful management of constipation with ease and is devoid of

any complications. Madanadi Guda Varti containing Madanaphala, Kutaja, Jeemuthaka, Ikshwaku, Dhamarghawa, Trivrit, Pippali, Maricha, Shunti, Sarshapa, Lavana and Gomutra, possess Katu, Tikta Rasa, Laghu, Ruksha, Teeksha Guna and Ushna Veerya does Vata-Kaphahara and Bhedana Karma. The prepared Varti when kept in lukewarm water, temperature equaled to rectal temperature, was found to start dissolving within 1 minute of Varti insertion and was completely dissolved within 15 mins, noting this time period of dissolution, it could be presumed to have started its action after 15 mins of insertion per-rectally. The properties of each drug are mentioned below in the table (Table no.3).[7]

Table 3: Showing the Properties of Drugs

S.no	Dravya	Botanical name	Rasa	Guna	Veerya
1	Madanaphala	Randia dumetorum Lam.	Madgura, Tikta	Laghu, Ruksha	Ushna
2	Kutaja	Holarrhena antidysenterica	Tikta, Kashaya	Laghu, Ruksha	Sheeta
3	Jeemuthaka	Luffa echinata Roxb.	Katu, Tikta	Laghu, Ruksha	Ushna
4	Ikshwaku	Lagenaria siceraria Standl.	Tikta	Lagu, Ruksha	Sheeta
5	Dhamarghawa	Luffa aegyptiaca Mill.	Tikta	Laghu, Ruksha, Tikshna	Ushna
6	Trivrit	Operculina turpethum	Tikta, Katu	Laghu, Ruksha, Tikshna	Ushna
7	Pippali	Piper Longum Linn.	Katu	Lghu, Ruksha, Tikshna	Ushna
8	Maricha	Piper Nigrum Linn.	Katu	Laghu, Tikshna	Ushna

9	Shunti	Zingiber officinale	Katu	Guru, Rukshna	Ushna
10	Sarshapa	Brassica nigra L.Koch	Katu, Tikta	Laghu, Snigdha	Ushna
11	Lavana	Sodium chloride	Lavana	Laghu, Ruksha	Sheeta
12	Gomutra	Cow's urine	Lavana, Katu	Tikshna	Ushna



Fig no.1: Raw drugs of Madanadigudavarti



Fig no.2: Choorna of Madanadigudavarti



Fig no.3: Bhavana with Gomutra

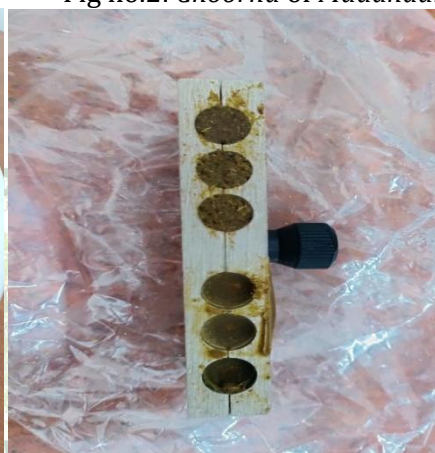


Fig no.4: Varti in mould



Fig no.5: Dried Varti



Fig no.6: Wrapped in the Aluminium foil

Physiology of Rectal Absorption^[8]

The veins of the rectum comprise of the superior hemorrhoidal vein, which drains into the inferior mesenteric vein and further joins the portal system, the middle and inferior hemorrhoidal veins enter the systemic venous circulation via the internal iliac veins. However, the inferior and middle hemorrhoidal veins bypass the liver and do not undergo first pass metabolism. Therefore, the drugs

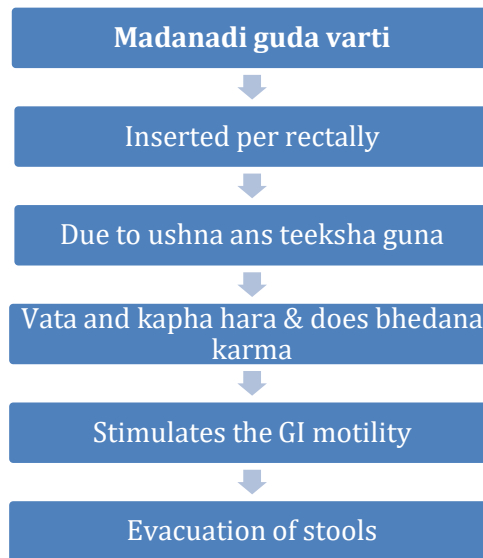
delivered through the anal route i.e., as suppositories are absorbed rapidly and effectively by the lower and the middle hemorrhoidal veins. As the rectum is not buffered and has a neutral pH, it paves way for better drug absorption. It also has a very little enzymatic activity; thus, enzymatic degradation does not occur. The mucus produced in the rectum is more capable of

tolerating various drug related irritations than the gastric mucosa.

Advantages of Rectal suppository^[9]

- No issues with oral abidance thus avoiding nausea and vomiting- Easily administered in unconscious patients.
- The achievement of a rapid systemic effect by giving a drug in a suitable solution (as an alternative to parental administration).

Probable Mode of Action



CONCLUSION

In Ayurveda, numerous studies are done in the management of constipation with the internal medication, but due to the lesser bioavailability of the drug through oral administration, it would lead to long term usage of the medicines, prolonging the agony of the affected. Unlike contemporary science, In Ayurveda there are no published studies on the effect of suppository in the management of constipation. Hence a pioneer attempt to study the effect of *Madanadi Guda Varti* in the management of constipation was proposed. In conclusion, the results of the study demonstrated that the *Madanadi Guda Varti* is highly effective and safe for clinical use in humans for the treatment of constipation.

ACKNOWLEDGEMENT

All the faculties, colleagues and staffs of Department of PG Studies in Shalya Tantra, Sri Sri college of Ayurvedic Science and Research Hospital, Bengaluru, Karnataka.

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- Drug absorption may be easily discontinued in the event of an accidental overdose.
- Ingestion of food or the rate of gastric emptying will not influence the rate of drug absorption
- First-pass elimination of high clearance drugs could be partly avoided.
- As there is no contact with the digestive fluids of the upper gastrointestinal tract, prevents or avoids the breakdown of some drugs.

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Cite this article as:

Ranjana Urs KL, KM Sweta. To Unravel and Evaluate the Efficacy of Madanadi Guda Varti in the Management of Constipation. International Journal of Ayurveda and Pharma Research. 2023;11(12):116-120.

<https://doi.org/10.47070/ijapr.v11i12.3067>

Source of support: Nil, Conflict of interest: None Declared

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