

Conceptual Study on Ayurvedic Pharmacodynamics of Gandhaka Rasayana wsr to Grahani Roga

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ABSTRACT

Background & Goals:

Vitiation of *Agni (Mandagni)* and *Dosha* cause *Grahani Roga*, a chronic illness of the digestive system that is closely tied to *Agni* state and dietary patterns. *Gandhaka Rasayana*, a popular *Ayurvedic* herbo-mineral formulation, was created by *Shuddha Gandhaka* through the serial *Bhavana* of eleven herbal medications eight times apiece. It is widely used to treat a wide range of gastrointestinal, skin, and wound ailments. An effort was made in this paper to prove properties and capabilities of *Gandhaka Rasayana* with special reference to *Grahani Roga*'s management.

Materials & Methods:

In this current paper, an attempt was made to gather and critically evaluate all of the *Gandhaka Rasayana* references that were available, taking into account their effects as well as the ayurvedic pharmacodynamics and mode of action of the herb in the treatment of *Grahani Roga*.

Observation and Conclusion:

Gandhaka Rasayana has all the qualities needed to effectively govern *Grahani*, including its important position in the activities of *Amapachana*, *Agnideepana*, *Rasayana*, *Kledaghna*, and *Krimihara*. *Gandhaka Rasayana* is therefore a highly useful medication in the treatment of *Grahani Roga*.

Keywords: *Mandagni; Agnideepana; Amapachana; Gandhaka Rasayana; Grahani.*

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INTRODUCTION

Ayurveda is referred to as the Science of Life in addition to being the texts or science used to treat sick people. One of *Ayurveda's* two primary basic approaches is the maintenance of healthy individual's *Sukhayu* and *Hitayu* (positive health) and the second is to address an individual's illness. More focus has been placed on protecting people's health and providing them with safe treatment, which can be accomplished by using *Ahara*, *Vihara* and *Aushadha* as directed. One of the key components of *Chatushpada*—the four most crucial elements for any disease's successful treatment—is *Aushadha*.

The primary cause of health is normal functions and harmony of *Agni* and *Annavahasrotas*¹. Any dysfunction of *Agni* will cause problems with many body systems and health. Due to this compromised *Agni*, *Dushti* of *Srotas*, a structural flaw and functional impairment of *Grahani* occurs, which causes *Grahani Roga*. *Mandagni* has been identified by *Acharya Charaka* as the primary cause of *Grahani Roga*. *Doshas* are vitiated by *Mandagni*. This will impede capability of *Grahani* to operate functions normally. Poor digestion of food results from functionally weak *Agni*, also known as *Mandagni*, which makes it difficult for *Grahani* to carry out its regular duties.

This, in turn, causes *Grahani Roga* which produces symptoms² like *Udarashoola* (abdominal pain), *Adhmana* (bloating), *Arochaka* (Anorexia and loss of appetite), *Avipaka* (indigestion), *Daurbalya* (weakness) *Muhurbaddha Muhurdrava* or *Atisristama* or *Vibaddhama Mala Pravrtti* (which is a loose, hard or semisolid stool), *Durgandhita Mala Pravrtti* (foul-smelling faeces), etc. Cardinal symptoms of *Grahani Roga* are alternate episodes of diarrhoea and constipation.

The *Ayurvedic* medical systems employ a wide variety of Herbo mineral-based formulations. Many formulations are created these days in *Ayurveda* due to the progress of pharmaceutical technology. Among them, *Gandhaka Rasayana* is a significant herbo-mineral medication that is widely used in a variety of clinical conditions or diseases, including skin conditions, allergies, respiratory disorders, bladder or urine disorders, diabetes, and as an appetizer. Additionally employed as a *Rasayana* (rejuvenator) *Yog*, *Gandhaka Rasayana* boosts immunity and *Sukhayu/hitayu* (positive health). An increase in immunity helps the body fend off a variety of illnesses. Because of its *Rasayana* quality, *Gandhaka Rasayana* is also a *vikaraprshaman* (therapeutic) agent in addition to a *swasthsaya swasthyakar* (prophylactic, or disease-prevention) agent.

MATERIALS & METHODS:

AIMS AND OBJECTIVES

To demonstrate, the efficacy of *Gandhaka Rasayana*, using the *Ayurvedic* pharmacodynamics with special reference to *Grahani Roga's* management.

INGREDIENTS OF GANDHAKA RASAYANA

The main option for treating *Grahani Roga* is *Agnivardhaka* medications, which have the qualities of Digestive (*Pachana*) and Strengthening (*Deepana*), according to the *Chikitsa Sutras* found in *Ayurvedic* teachings. *Gandhaka Rasayana* has also been mentioned by *Chakradatta* as a therapy for *Ama*³. *Yogratnakar* has also cited *Gandhaka Rasayana* in cases of *Agnimandya*, *Grahani Roga*, and severe *Atisara*⁴. For this conceptual investigation, *Gandhaka Rasayana*, which is derived from *Yog Ratnakar*, has been used as a medication.

Table No. 1: Showing the Ingredients and Rasapanchaka of Gandhaka Rasayana⁵

S.N.	Nmae of Drug	Rasa	Guna	Veerya	Vipaka	Doshkarma	Amayika Prayoga
1.	<i>Gandhaka</i>	<i>Madhur (R.R.S) Katu, Tikta (A.P)</i>	<i>Sara, Snigdha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha- Vatahara Pittavardh aka</i>	<i>Amanashaka, VishAhara, Krumighna, Shodaka, Janthujith</i>
2.	<i>Dalchini</i>	<i>Katu, Tikta, Madhur</i>	<i>Laghu, RukshaTi kshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphavata ghna</i>	<i>Deepana, Pachana, Vatanuloman</i>
3.	<i>Ela</i>	<i>Katu, Tikta</i>	<i>Laghu, Ruksh</i>	<i>Ushna</i>	<i>Katu</i>	<i>Tridoshagn a</i>	<i>Rochaka, Deepana</i>
4.	<i>Tejpatra</i>	<i>Katu, Tikta, Madhur</i>	<i>Laghu, RukshaTi kshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphavata ghna</i>	<i>Deepana,Pacha na, Vatanuloman</i>
5.	<i>Nagakesa r</i>	<i>Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphapitta ghna</i>	<i>Vishaghna</i>
6.	<i>Guduchi</i>	<i>Tikta, Kashaya</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Tridosha shamaka</i>	<i>Rasayana, Dahaghna</i>
7.	<i>Haritaki</i>	<i>Kashaya pradana</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Tridoshagn a</i>	<i>Deepana, Pachana, Anulomana</i>
8.	<i>Vibhitaka</i>	<i>Kashaya, Madhur</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Kaphavata ghna</i>	<i>Bhedana, Keshya, Chakshushya</i>
9.	<i>Amalaki</i>	<i>Amla Pradhan</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Tridoshagh na</i>	<i>Rochaka, Sara, Chakshushya</i>
10.	<i>Shunti</i>	<i>Katu</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Vatakapha ghna</i>	<i>Grahi, Vrishya</i>
11.	<i>Ardraka</i>	<i>Katu</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Vatakapha ghna</i>	<i>Deepana, Amapachana, Vrishya</i>
12.	<i>Bhrungar aj</i>	<i>Tikta, Katu</i>	<i>Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphavata ghna</i>	<i>Vishaghna, Rasayana, Balya, Chakshushya</i>
13.	<i>Sharkara</i>	<i>Madhur</i>	<i>Snigdha, Guru</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Vatapittag hna</i>	<i>Dahanashaka</i>

ANALYSIS OF AYURVEDIC PHARMACODYNAMICS OF GANDHAKA RASAYANA:

Upon reviewing the table of contents, one might draw certain cumulative inference on the *Gandhaka Rasayana*. Cumulatively – *Gandhaka Rasayana may a Katu, Kashaya rasa pradhana, Laghu, Aruksha* (neither too *Ruksha* nor too *Snigdha*) *Guna Yukta, Ushna Veeryavan, Madhura Vipaki Ayurvedic* formulation with *Tridoshaghna* properties.

Different ingredients of *Gandhaka Rasayana* have specific pharmacodynamic properties like: *Gandhaka* has *Amanashaka, Vishahara, Krumighna, Shodaka, Janthujith; Godugdha* has *Ojovardhaka; Shrkara* has *Dahanashaka; Dalchini* has *Deepana, Pachana, Vataanulomana; Ela* has *Rochaka, Deepana; Tejpatra* has *Deepana, Pachana, Vatanulomana; Nagakesar* has *Vishaghna; Guduchi* has *Rasayana, Dahaghna; Haritaki* has *Deepana, Pachana, Anulomana; Vibhitaki* has *Bhedana, Keshya, Chakshushya; Amalaki* has *Rochaka, Sara, Chakshushya; Shunti* has *Grahi, Vrishya; Ardraka* has *Deepana, Amapachana, Vrishya; and Bhrungaraj* has *Vishaghna, Rasayana, Balya, Chakshushya* properties.

PREPARATION

First of all, powdered *Ashuddha Gandhaka* should be melt in a steel tank with a thick base at *Mandagni* using *Ghrta*. *Ashuddha Gandhaka* must be poured slowly but quickly over the cloth covering the steel jar holding the heated *Dugdha* once it has completely melted. *Dugdha* needs to be filtered and discarded. To remove any remaining milk particles and *Ghrta*, the *Gandhaka* needs to be collected, properly washed in hot water several times, dried, and then pulverized. Three times (*Trivaram*) this procedure has been repeated, with each time *Dugdha* and *Ghrta* being replaced. *Gandhaka* was always weighted, dry, and powdered. The *Khalva Yantra* was filled with powdered *Shuddha Gandhaka*. Next, trituration of 11 dravyas like *Ela, Twak (Dalchini), Patra (Tejpat), and Nagakeshar, Guduchi, Haritaki, Bibhitaki, Amalaki, Shunthi*, as well as fresh juice (*Swarasa*) from *Ardraka swarasa* and *Bhringraj*, should administered eight times each.

MODE OF USE, DOSAGE AND ADJUVANTS^{7,8}

Ayurvedic scriptures propose an internal dosage of 1 *Karsha/1 Aksha* (12 gms). Adults are advised to take 500 mg twice a day, both generally and in this specific study. During the treatment period (one *mandala* – 48 days), one should not eat bitter gourd, oil (*Taila*), sour (*Amla*), alkalis (*Kshara*), or salt. For best benefits, *ayurvedic* literature advise acting consistently for a period of six months.

INDICATION OF GANDHAKA RASAYANA⁹

The following are the uses or indications of *Gandhaka Rasayana*, according to as described in *Ayurvedic* texts –

1. *Virya Pushti*: Promotes sexual and semen quality
2. *Dridha Deha*: Builds the body strong
3. *Dridha Agni*: Strengthens the fire in the stomach
4. *Kandu Hara*: Alleviates scratching or itching
5. *Kustha Hara*: Treats all skin conditions
6. *Ugra Visha dosha Jaya*: Treats severe poisoning
7. *Ghoratisara*: Treats severe diarrhea and dysentery
8. *Grahani*: Treats irritable bowel syndrome and other intestinal disorders
9. *Hareccha raktam dridha shoola yukta* – Puts an end to excruciating bleeding
10. *Jeerna Jwara*: Treats persistent fevers
11. *Mehaghna*: Treats diabetes of all kinds
12. *Vatamaya*: Treats all Vata illnesses
13. *Prajakaram*: The cure for infertility
14. *Kesha Krishneekarana*: Leads to hair blackening
15. *Soma Roga*: Treats gynaecological disorders with excessive white discharge
16. *Mushka vridhhi*: Treats testicular enlargement
17. *Sakala roga hareth*: All ailments are healed
18. *Mrita sadrishha Naraanaam Pranado*: Restores life to the dying

19. *Dheergh Ayukara*: Prolongs life
20. *Dustha Udara*: Treats enlargements of the abdomen
21. *Sannipata Rogahara*: This remedy treats all forms of *Sannipataja* illnesses
22. *Rajayaksha*: Heals Tuberculosis
23. *Khaya*: Treats depletive illnesses
24. *Shasha*: Treats respiratory conditions like asthma
25. *Arsha*: Treats haemorrhoids / Piles

DISCUSSION

As per *Acharya Charaka*, *Grahani* is considered the seat of *Agni* due to its reception of sustenance from above. Nonetheless, the duodenum is recognized as the *Grahani's* most functional and regulating component, but because of its location above the *Nabhi*, ability to hold up undigested food and move digested food forward, the small intestine, or *Adhoamashaya*, along with the pyloric and ileocecal sphincters, can be regarded as *Grahani* from an anatomical and physiological standpoint.

Regarding *Grahani Roga*, the main problem is *Agni Dushti* (i.e., vitiation of digestive fire), which frequently results in *Mandagni*, which can then lead to the development of *Ama* and possibly *Suktapaka*, which might lead to *Grahani* manifestation. *Shuddha Gandhaka* has *Agnideepaka*, *Amapachaka*, *Vishaghna*, *Rasayana*, *Balaya*, *Krimighna*, and *Shodaka* qualities, which are further strengthened by *Bhavna* (trituration) of 11 herbal constituents of *Gandhaka Rasayana*, according to the etiopathogenesis of *Grahani*.

The properties of *Gandhaka* are enhanced and its medicinal effects are increased by the phytochemical ingredients found in *Bhavana dravya* along with trace elements.¹⁰ One of the most main components of the *Gandhaka Rasayana*, *Gandhaka* acts on all *Dhatu*s through its *Rasayana* quality, activating the *Dhatwagnis*.¹¹ It shown that every property required to treat *Grahani* is found in every element of *Gandhaka Rasayana*. Together, the properties of *Gandhaka Rasayana*¹² include *Katu* and *Kashaya rasa*, *Laghu* and *Aruksha Guna* (not too *Ruksha* nor too *Snigdha*), *Ushna Veerya*, *Madhura Vipaka*, and *Tridoshaghna* (works on all three *Doshas*), which are make it much beneficial, not only to treat the *Grahani Roga* but also capable to treat the other various disorders. It functions as *Dahanashak* despite possessing *Ushnaveerya* because of its *Madhura Vipaka* and the existence of *Dahaghna dravyas* like *Guduchi* and *Sharkara*.

The *Gandhaka Rasayana* contains pharmaceuticals such as *Dalchini*, *Tejapatra*, *Haritaki*, *Shunthi*, and *Ardraka* that improve the properties of *Deepana*, *Pachana*, and *Vatanulomana*. These drugs operate on *Mandagni*, which is the primary cause of *Grahani Roga*. In *Grahani Roga*, ingredient like *Ela* and *Amalaki* improve the *Rochana Guna*, which alleviates the *Aruchi* symptoms. *Bhavana Dravya*, such as *Bhringraj*, *Guduchi*, *Amalaki*, and *Vibhitaka*, aid in enhancing *Gandhaka's Rasayana* activity. *Bhringraj* improves *Balya Guna*, which makes the body stronger and is less present in *Grahani* Patients. The *Gandhaka Rasayana's Vishghna Guna* is strengthened by *Nagakeshar* and *Bhringraj*. As *Raktapachana* and *Sthambana*, *Nagakesara* is beneficial for illnesses related to *Daha* and *Srava*.

The classical *Ayurvedic* texts list the following benefits of *Gandhaka Rasayana*: *Dipana* (which stimulates *Agni*), *Pachana* (digestant), *Laghu* (which makes the body lighter), *Aruchinashaka* (antidiarrheal), *Jvaraghna* (antipyretic), *Vrishya* (which increases vitality and strength), and *Rasayana* (which contains antioxidants). By restoring the vitiated *Doshas* in the colon and maybe through its anti-inflammatory and wormicidal properties, it functions on the fundamental level of *Agni*. *Gandhaka Rasayana* works on the *Grahani's* underlying cause by lowering the *Ama Dosh*a. Thus, *Gandhaka Rasayana* is said to have an effect on *Dhatu*, *Mala*, and *Dosha*. For this reason, *Gandhaka Rasayana* improves and develops *Dhatwagni* (digestive fire) and raises *Dhatubala* (body tissue strength) in addition to aiding in the breaking of *Samprapti* of *Grahani*.

CONCLUSION

It may be concluded that inappropriate diet and lifestyle (*Mithya Ahara Vihara*) are the main causes of *Agni* imbalance and consequent incidence of *Grahani Roga* and *Gandhaka Rasayana* is a very successful medicine in the treatment of *Grahani Roga*.

Grahani is a sickness that takes a long time to heal. Its therapeutic qualities have been the subject of several promising early investigations, which indicate that *Grahani Roga* may benefit more from its use. In order to draw firm findings, it is advised that this be investigated on clinical research involving a greater number of patients and more precise laboratory measurements.

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