

A LITERARY REVIEW ON *PRAPOUNDARIKADYA GHRI*Dr. Preeti^{1*}, Dr. Shailendra², Prof. Dr. Neelam Gupta³ and Dr. Mrigank Shekhar⁴¹P.G. Scholar, Dept. of Shalya Tantra, Govt. P.G. Ayurveda College and Hospital, Varanasi.²Ex. Associate Professor, Dept. of Shalya Tantra, Govt. P.G. Ayurveda College and Hospital, Varanasi.³Professor, Dept. of Rachna Sharira, Govt. P.G. Ayurveda College and Hospital, Varanasi.⁴Assistant Professor, Dept. of Shalya Tantra, Govt. P.G. Ayurveda College and Hospital, Varanasi.

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ABSTRACT

Shalya Tantra, one of the eight branches of *Ayurveda*, focuses on surgical or parasurgical procedures and management of wound. *Vrana ropana*, or wound healing is a complex process that requires careful management to prevent complication and promote optimal recovery. *Ayurvedic* treatment is based on four essential components: *Bhishak* (Physician), *Dravya* (*Aushadha*), *Upasthata* (Nurse), and *Rogi* (Patient).^[1] *Aushadha* is one of the four factors of *Ayurvedic* treatment. *Prapoundarikadya Ghrita*, a polyherbal formulation mentioned in ancient texts such as *Shusruta Samhita*, *Bhaisajya Ratnawali* and *Chakradatta Samhita* for the management of the wound and abscess.^[2,3,4] This formulation is a complex blend of 6 herbal ingredients such as *Prapoundarika*, *Manjishtha*, *Madhuka*, *Ushira*, *Padmaka*, *Haridra* known for their healing properties and is traditionally used for its potent wound-healing capabilities. This review aims to delve into the intricate composition, pharmacological properties, therapeutic benefits, and clinical applications of *Prapoundarikadya Ghrita* in the context of *Shalya Tantra*.

KEYWORDS: *Shalya Tantra*, *Bhishak*, *Dravya*, *Upasthata*, *Rogi*, *Prapoundarikadya Ghrita*, *Vrana* etc.

INTRODUCTION

In the realm of *Shalya Tantra*, *Prapoundarikadya Ghrita* is a specialized medicated *ghrita* formulation that exemplifies the profound integration of *Ayurvedic* principles in wound care and surgical practices. *Prapoundarikadya Ghrita* is formulated using a meticulous combination of herbs such as *Prapoundarika* (*Nelumbo nucifera*), *Manjishtha* (*Rubia cordifolia*), *Madhuka* (*Glycyrrhiza glabra*), *Ushira* (*Vetiveria zizanoides*), *Padmaka* (*Prunus cerasoides*), *Haridra* (*Curcuma longa*) and *Ghrita* (Cow butter) known for their ability to heal wound. The selection and preparation of this formulation is guided by ancient *Ayurvedic* texts such as *Shusruta Samhita*, *Chakradatta* and *Bhaisajya Ratnawali* ensuring synergistic efficacy and therapeutic potency. The *ghrita* base of *Prapoundarikadya Ghrita* facilitates the absorption of active constituents deep into the tissues, promoting their bioavailability and amplify their healing effects.

Ayurveda, the science of life places a strong emphasis on the use of natural components in the healing process because of its holistic approach to health. The herbal ingredients of *Prapoundarikadya Ghrita* have been traditionally acclaimed for their medicinal virtues, which are now increasingly being recognized by contemporary

science. The purpose of this review is to compile and summarize the available literature regarding the pharmacological properties and therapeutic potentials of the ingredients in *Prapoundarikadya Ghrita*. This review attempts to provide a thorough knowledge of how these substances contribute to the formulation's overall efficiency in *vrana shodhana* and *vrana ropana* by analysing classical *Ayurvedic* literature with modern scientific studies.

AIMS AND OBJECTIVES

- To put an insight on various references and indications of *Prapoundarikadya Ghrita*.
- To evaluate the *Rasa panchaka* of *Prapoundarikadya Ghrita*.
- To understand the basic principle behind the wound healing ability of ingredients of *Prapoundarikadya Ghrita*.

MATERIAL AND METHOD

The material is taken from various *ayurvedic* texts.

Literature^[2,3,4]

Sr. No.	Name of Book	Context	Indication
1.	<i>Sushruta Samhita</i>	<i>Vidradhi Chikitsa Adhyaya</i>	<i>Paittika Vidradhi</i>
2.	<i>Chakradatta</i>	<i>Vranashoth Chikitsa Adhyaya</i>	<i>Vrana</i>
3.	<i>Bhaisajya Ratnawali</i>	<i>Vrana Chikitsa Adhyaya</i>	<i>Vrana</i>

COMPOSITION^[5,6,7,8,9,10,11,12]

Sr. No.	Ingredients	Botanical Name	Part Used	Ratio
1.	<i>Prapoundarika</i>	<i>Nelumbo nucifera</i>	whole plant (mainly flower, leaves, root)	1 Part
2.	<i>Manjishtha</i>	<i>Rubia cordifolia</i>	Root	1 Part
3.	<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i>	Root	1 Part
4.	<i>Ushira</i>	<i>Vetiveria zizanoides</i>	Root	1 Part
5.	<i>Padmaka</i>	<i>Prunus cerasoides</i>	Stem bark, seeds, heart wood	1 Part
6.	<i>Haridra</i>	<i>Curcuma longa</i>	Rhizome	1 Part
7.	<i>Goghrita</i>			4 Part
8.	<i>Goksheera</i>			16 Part

PROPERTIES OF INGREDIENTS

Sr. No	Plant name	Rasa	Guna	Virya	Vipaka	Doshagnata
1.	<i>Prapoundarika</i>	<i>Kashaya, Madhura, Tikta</i>	<i>Laghu, Snigdha, Picchila</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Kapha Pitta hara</i>
2.	<i>Manjishtha</i>	<i>Madhura, Tikta, Kashaya</i>	<i>Guru, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha Pitta hara</i>
3.	<i>Yashtimadhu</i>	<i>Madhura</i>	<i>Guru, Singdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vata Pitta hara</i>
4.	<i>Ushira</i>	<i>Madhura, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kapha Pitta hara</i>
5.	<i>Padmaka</i>	<i>Tikta, Kashaya</i>	<i>Laghu, Snigdha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>kapha Pitta hara</i>
6.	<i>Haridra</i>	<i>Katu, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha Vata hara</i>
7.	<i>Goghrita</i>	<i>Madhura</i>	<i>Guru, Snigdha, Mridu</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vata pitta hara</i>
8.	<i>Goksheera</i>	<i>Madhura</i>	<i>Guru, Mridu, Snigdha, Shlakshna, Picchila, Bahala, Prasanna, Manda</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vata Pitta hara</i>

ACTIVE PROFILE OF INGREDIENTS

Sr. no.	Ingredients	Constituents	Pharmacological activity
1.	<i>Prapoundarika</i>	Robinin, Nuciferine, Asmilobine, Isolensinin, Neferine	Haemostatic, Antifibrosis, Antioxidant, Anti-Inflammatory, Antibacterial, Antifungal
2.	<i>Manjishtha</i>	Anthraquinones, Saponins, Glycosides, Rubiadin, Tannins, Manjisthin, Alizarin	Pigmentation, Blood Purifier, Astringent, Anti Inflammatory, Antiseptic, Rubimallin Showed Antibacterial Activity
3.	<i>Yashtimadhu</i>	Glycorrhizine, Malic Acid, Resin, Cumarine And Cinnamic Acid.	Anti Inflammatory, Anti- ulcer, Expectorant, Blood Purifier.
4.	<i>Ushira</i>	Allokhusiol, Benzoic Acid, Vetiverol, Zizanol. Eugenol, Khusitoneol, Khusimyl Acetate, Vanillin	Antibacterial, Antifungal, Antispasmodic, Antioxidant, Anthelmintic.
5.	<i>Padmaka</i>	Prunetin Puddumin A, Genestein, Genkwanin, Cerasinone, Cerasidin and Cersin.	Antifungal, Wound Healing, Antipyretic, Antioxidant.
6.	<i>Haridra</i>	Curcumin, Germacrone, Tumerone, Curcumenol, Turmeronol A & B, B-Tumerones, B-Bisabolene, A-	Antibacterial, Antiseptic, Cholagogue, Insecticidal, Antifungal, Anti- Inflammatory, Antiprotozoal, Antihistaminic. Effect Of Essential Oil and

		Curcumene, Zingiberine,	Curcumin Are Antibacterial And Antifungal.
7.	Goghrita	Beta Carotene, Vit. E	Antimicrobial, Expectorant
8.	Goksheera	Glycomacropetides	Wound Healing

DISCUSSION^[13]

Prapounadrikadya Ghrita is one of the important, unexplored formulation used for wound healing as mentioned in Sushruta Samhita, Chakradatta, Bhaisajya Ratnawali. It's ingredients possess all properties of *Vrana Shodhana* and *Vrana Ropana*. Literary meaning of *Vrana Shodhana* is cleansing of vitiated wound while meaning of *Vrana Ropana* is the process of healing. It is a well-known fact that understanding of action of drug is essential for their rational use. In Ayurveda it is explained on the basis of *Rasapanchak* (*Rasa, Guna, Virya, Vipaka, Prabhava*) i. e. pharmacodynamic properties of the drug. After reviewing literature it is observed that the ingredients possess properties like *Madura, Katu, Tikta, Kashaya Rasa, Guru, Snigdha Guna, Sheeta Virya and Katu Vipaka* which play a vital role in wound healing. *Katu, Tikta, Kashaya Rasa* have property of *Vrana Shodhana*. *Tikta and katu rasa* have *Krimighana* action (anti-bacterial and anti-fungal action). *Katu Rasa* also has *Shothahara* action (anti-inflammatory effect). *Tikta* and *Kashaya Rasa* have moisture reducing

property which is helpful in reduction of excessive exudate from wound bed. *Sheeta virya* has *stambhana* (hemostasis) property. It provides nutrition to newly forming tissue in wound. It also relieves a burning sensation in the wound. *Kashaya rasa* due to its *Sandhanakarma* (tissue binding action) helps in wound closure and *Madhura rasa* helps in *Dhatu Poshana* (tissue regeneration). *Kashaya* and *Madhura rasa* also gives strength and tissue granulation to the wound. *Guru guna* facilitates wound tissue epithelization and proliferation. It also provides nutrition to newer forming cells of wound. In contemporary science, *vrana shodhana* and *vrana roopana* properties of ingredients of *Prapoundarikadya Ghrita* can be postulated on the basis of chemical constituents like Nuciferine, Saponins, Tannins, Manjisthin, Malic Acid, Cumarine Allokhusiol, Benzoic Acid, Zizanol, Tumerone, Vit. E which shows Hemostatic, Antifibrosis, Antioxidant, Anti-Inflammatory, Antibacterial, Antifungal, Antiseptic effect.



Fig. 1: Prapoundarika whole plant.



Fig. 2: Manjishtha whole plant.



Fig. 4: Yashtimadhu whole plant.



Fig. 3: Root.



Fig. 5: Root.



Fig. 6: Ushira whole plant.



Fig. 7: Root.



Fig. 8: Padmaka whole plant.



Fig. 9: Stem.



Fig. 10: Haridra whole plant.



Fig. 11: Rhizome.

CONCLUSION

This review concluded that ingredients of *Prapoundarikadya Ghrita* exhibits a wide range of pharmacological properties that collectively contribute to its potential in *shodhana* and *ropana* of *vrana* (wound healing). The anti Haemostatic, antifibrosis, antioxidant, anti-inflammatory, antibacterial, antifungal inflammatory, antioxidant, collagen-stimulating and tissue regeneration effects of this formulation highlight the efficacy of Ayurvedic principles in surgical specialties but also offer a sustainable and holistic approach to promoting wound healing and overall well-being. Further research and clinical studies are warranted to explore its full potential and expand its application in various type of wound.

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