



An Ayurvedic Review on Jatyadi tail with Special References to Vrana Ropan (Wound Healing)

Dr Baljeet Singh Nehra Assistant Professor, Dept of Shalya Tantra, MLR Ayurvedic College
Charkhi Dadri.

Corresponding Author: Dr Baljeet Singh Nehra Assistant Professor, Dept of Shalya
Tantra, MLR Ayurvedic College Charkhi Dadri.

Email- nehra.drbaljeet@gmail.com

Mobile- 7357202000

Abstract- Wounds, or vrana, are a very common and recurrent complication in surgical treatment. The patient's condition is made worse by the presence of Vrana, which can have grave consequences. Local wound variables, such as slough, infection, and foreign bodies, interfere with the normal healing process. In comparison to a contaminated wound, a healthy wound in a normal body heals more quickly and leaves fewer scars. Since ancient times, managing wounds has been of utmost importance. Successful wound care includes the use of the right drugs, wound dressings, and dietary guidelines. Wound healing is a complex process. Almost half of Sushruta's work is devoted to detailing various facets of wound healing. One of the 60 treatment methods (Shashti- upakram) of vrana is ahar (diet). Jatyadi Taila was applied locally to the patients as a kind of treatment. The results showed that Jatyadi Taila had a better therapeutic efficacy across the board for all Vrana symptoms without posing any risks.

Keywords-

Introduction-

One of the key subdisciplines of Ayurveda is Shalya Tantra, which contains descriptions of various surgical and parasurgical techniques. Sushruta was a prominent surgeon of his time who not only developed the idea of surgical principles but also laid the foundation for modern plastic surgery. He was also far ahead of his time in explaining and putting into practise the lovely idea of wound healing.¹ Aside from his contributions to plastic surgery and wound healing, his work on haemostasis, burns, fracture management, etc. is comparable to that still held to be the best.

The Shalya Chikitsa study makes it abundantly evident that the Vrana (wound) is the most important surgical entity, and that a surgeon's ability to effectively manage it is the fundamental competency around which the success of surgery is based. The four primary clinical signs of vrana are vedana, varna, strava, and gandha.² To treat a wound is to carry out the process of tissue repair in a way that is most beneficial to the patient's present and future welfare. Having such knowledge of both contemporary medical principles and Vrana Shodhan & Ropana (Wound Healing). Every surgeon's primary goal is to improve wound healing while producing the fewest scars and the least amount of discomfort possible. In Purvkarma, Pradhankarma, and Pashchatkarma, Acharya Sushrut emphasised vrana more. All the safety measures recommended by Acharya Sushrut must be followed during Purvkarma, Pradhankarma, and Pashchatkarma help in quicker wound healing and fewer problems.³

According to Ayurveda, vitiation of the doshas causes wounds to become infected and develop dushta. The primary cause of the vitiation of doshas, ama, and malformation of dhatus is an abnormality of the digestive power (Agni) (body tissues). Therefore, it is crucial to establish digestive power equilibrium. This goal is accomplished by using a healthy diet recommended for injured people. According to contemporary science, malnutrition prevents both acute and chronic wounds from healing. Compared to healthy patients, patients who are malnourished are more likely to develop wound infections. Healing from wounds is an anabolic process that needs both nutrients and energy. For connective tissue repair and wound healing, amino acids, specific vitamins including Vitamins A, B complex, and C, minerals, carbohydrates, proteins, polyunsaturated fatty acids, and micronutrients like Zinc, Magnesium, Iron, and Copper are crucial.⁴

It is generally known that a number of medications derived from plant sources speed up the recovery from various types of wounds. While the potential of the many herbal compounds has not yet been fully realised, several of these substances have been investigated scientifically for their wound healing actions both experimentally and therapeutically in various pharmacological models. Very few active chemical components, such as anthraquinones (Manjishtha), Jasminine (Jati), Curcumine (Haridra), Berberine (Daruharidra), etc.⁵ were said to serve the healing processes only partially, demonstrating the difficulty of achieving the full goal of wound management with a single drug.

Vrana-

Vrana is a condition where the body's tissues are selectively destroyed and repaired, leaving a scar that lasts the rest of one's life. The Acharya Sushruta made it very clear in the Sushruta Samhita that Vrana is not just restricted to subcutaneous lesions but also includes destructive lesions that occur in all tissues. His description of Vrana adisthana or Vrana vastu makes this apparent⁶.

Etymology-

The root "vriya," which means "to recover," is the source of the word "vrana." The "ch" sound is omitted and the form remains "vrana" + "a" in the sense of "Gatra Vichurnena."⁷

Definition-

“Vrana gatra vichurnane vranyatiti Vranah”

Gatra is tissue (body tissue of part of body). "Vichurnane" refers to bodily destruction, breakage, rupture, and discontinuity.⁸

The term "Vrana" refers to the destruction, rupture, and discontinuity of body tissue. Denotes phenomena complicated that causes tissue in a specific area of the body to be destroyed, ruptured, or discontinued. This phenomenon is referred to as Vrana, whereas Vranayati means discolouration. As a result, the concept of Vrana suggests that harm to a body component that causes discoloration. In Sushruta Sutras Chapter-21,⁹ Acharya makes it clear that a lesion is referred to as a Vrana because its imprint endures for the rest of one's life and its Vranavastu (scars) never completely go after a wound has healed.

Classification:

Ayurvedic treatises have classified the Vrana as follows:

1. Nija vrana

2. Agantuja vran

Nija vrana-

According to Dosas it is 15 types.

1. Vataja 2. Pittaja 3. Kaphaja 4. Raktaja 5. Sannipataja 6. Vata-Pittaja 7. Vata-Kaphaja 8. Pitta-Kaphaja 9. Vata-Shonitaja 10. Pitta-Shonitaja 11. Kapha-Shonitaja 12. Vata-Pitta-Shonitaja 13. Vata-Kapha Shonitaja 14. Pitta-Kapha-Shonitaja 15. Vata-Pitta-Kaphaja 16. Shuddha Vrana.

Agantuja vrana:

Sushruta divides it into six sub-types based on the type of wound produced by various weapons and the location of the lesion. While Ashtang Hridayakara lists eight subtypes, Ashtang Sangraha only lists three, with each subtype being further defined and given a unique name depending on the severity of the damage¹⁰.

S.No.	Sushruta Samhita (Su.Chi.2/9-10) Madhava Nidana (Ma.Ni.43/2)	Ashtang Hridaya (As.Hr.Utt.26/2)	Ashtang Sangraha (As.Sam.Utt.31/2)	Sharangdhara Samhita (Sha.Pu.7/76)
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1.	Chhinna	Patita	Chhinna (a) Ghrishta (b) Avakrita (c) Vichhinna (d) Vilambita (e) Patita	Chhinna
2.	Bhinna	Bhinna	Viddha a. Anubhinna b. Bhinnotundita c. Atibhinna d. Nirviddha e. Anuviddha f. Nirbhinna g. Uttundita h. Atividdha	Bhinna
3.	Viddha	Viddha	Picchita	Vilambita
4.	Kshata	Pravilambita	-	Aviklapta
5.	Picchita	Vidalita	-	Ghrishta
6.	Ghrishta	Ghrishta	-	Nipatita
7.	-	Avkrita	-	Prachalita
8.	-	Vicchinna	-	-

Vrana pariksha:

1. According to Sushruta-
Panchendriya Pariksha

Darshanendriya- Akriti, Varna, Srava, Sthana

Ghranaendriya- Gandha

Karnendriya- Shabda

Sparshendriya- Ushnata, Sheetata, Mriduta, Kathinya

Rasnendriya Pariksha is contraindicated in Vrana.¹¹

2. According to Charaka-

Trividha Pariksha

Darshana-Varna Pariksha of Vrana and Vranita both

Sparshana- Ushnata, Sheetata, Mriduta, Kathinya

Prashna- Hetu, Vedana, Lakshana, Kala¹²

Principle of Management of Vrana-

Vrana Chikitsa should be done in Vranithaagaara to prevent the invasion of Nishacharas in Vranithasya. It must be auspicious and in line with Vaastushastra, among other things. By living in such an Aagaara, Vranitha won't experience bodily, mental, or traumatic illnesses,

hence Rakshakarma should be performed in addition to Dhoopana. While Acharya Sushruta described saptopakrama and Shasti Upakaramas, Charaka Samhita states that there are 36 ways to treat vrana. Only Shasti Upakaramas are summarised in Saptopakrama. Only after considering Vrana's various stages, Doshas, and circumstances is the best method chosen.

Vrana Ropana:

According to ayurveda, managing vrana entails healing vrana, also known as ropana, at different stages of vrana, such as ropana at Dushtaawastha, ropana at Shuddhaawastha, ropana at Ruhyamanaawastha, and ropana at Rudhaawastha. At each stage of vrana's development, the ropana process aids in healing it. Age, sthana, sex, the presence of other diseases (such as diabetes, skin conditions, and tuberculosis), the environment, ahara-vihara, and the presence of other poisonous bodies are just a few of the variables that can affect the healing process.¹³

Jatyadi Taila-

Traditional medicine regularly employs jatyadi tail to promote the healing of ulcers, eczema, scalds, and burns as well as chronic wounds (including diabetic sores).¹⁴ It is applied externally for abhyanga, which includes treating Kandu (itching), Sphotaka (boiling), Nadivrana (fistula), Shastra prahara Vrana (wounds from sharp objects), Dagdha Vrana (burn ulcer), Danta-Nakha Kshata (tooth and nail damage), and Dusta Vrana (Non-healing ulcer)¹⁵.

Ingredients of Jatyadi Taila¹⁶-

S.no.	Plant name	Botanical name	Family	Medicinal Properties
1.	Jaati	<i>Jasmiun officinale</i>	Oleaceae	Anti-inflammatory and antioxidant properties.
2.	Haridra	<i>Curcuma longa</i>	Zingiberaceae	Antimicrobial property
3.	Daru-haridra	<i>Berberis aristate</i>	Berberidaceae	Antimicrobial property
4.	Nimba	<i>Azadirecta indica</i>	Meliaceae	Antimicrobial and anti bacterial property
5.	Patola	<i>Tricosanthus dioca</i>	Cucurbitaceae	Anti bacterial property
6.	Karanja	<i>Pongamia pinnata</i>	Fabaceae	Wound cleansing property
7.	Kushta	<i>Sassurea lappa</i>	Asteraceae	Antimicrobial and anti bacterial property
8.	Madhuka	<i>Glyccirriza glabra</i>	Fabaceae	Wound healing property
9.	Manjistha	<i>Rubia</i>	Rubiaceae	Wound cleansing property

		<i>cordifolia</i>		
10.	Padmaka	<i>Prunus cerasoides</i>	Rosaceae	Antimicrobial and anti bacterial property
11.	Haritaki	<i>Terminalia chebula</i>	Combretaceae	Antimicrobial property
12.	Lodhra	<i>Symplocos recemosa</i>	Symplocaceae	Antimicrobial property
13.	Neelotpala	<i>Nymphaea stellata</i>	Nymphaeaceae	Astringent and antiseptic
14.	Sariva	<i>Hemidesmus indicus</i>	Asclepiadaceae	Wound cleansing property
15.	Sikthaka	-	-	Antioxidant properties
16.	Tutha	-	-	Wound healing property
17.	Tila tail	<i>Sesamum indicum</i>	Pedaliaceae	Wound healing property

Method of preparation-

Murchhita Tila Taila (4 part) was heated on mild heat, then Kalka of all ingredients mentioned in Table no.2 (all together with 1 part of Taila) was added and fried for 5 minutes. Later, Water (16 parts) was added and heating was continued till vaporizing all content of water. After testing for Taila Siddhi Lakshana, Jatyadi tailam was prepared¹⁷.

Mode of action of Jatyadi Taila - Constant infection of the wound is a key factor preventing a Vrana from healing normally. A medicine that has a calming effect is more appropriate in this condition. Examples include Vraa Shodhana, Vraa Ropa, Vedana Sthapana, and Vata-pittahara action.

Discussion-

In ayurvedic science the acharya sushruta mentioned many different aspect of vrana regarding characteristics, types, pathogenesis its treatment modalities and prognosis in his treatise sushruta samhita. He discussed the vrana (wound) characters in Vrana prashniya Adhyaya. Prior to it, however, he vehemently highlighted the need for wound care and patient-friendly diets. He divided vrana primarily into two categories: 1. He was fully aware of the aetiopathogenesis of vrana. 2. Nija vrana. Varana agantuja. The three main elements in Jatyadi taila are Ropaka, Vedanasthapana, and Shothahara. Ingredients with antibacterial properties include neem, haridra, daruharidra, abhaya, and lodhra. Ingredients like Manjistha, Sariva, and Karanja have vrunashodhana (wound cleansing) properties. The antioxidant and wound-healing capabilities of Naktahva and Abhaya. Katuka enhances re-epithelialization, neo-vascularization, and fibroblast, dermal myofibroblast, and endothelial cell migration into the wound bed. The

vrunaropana (Wound healing) effect of Jati, Patola, and Sikta Kushta acts as an anti-inflammatory. When applied topically, madhuka has a calming and healing effect on skin blemishes. The astringent and antibacterial qualities of *Nymphaea stellata*.

Conclusion-

The vrana and administration are covered in the classical ayurvedic treatises. The vrana might be a surgical wound, an ulcer, or a wound. Ayurveda uses shasti upakarmas to effectively treat common wound complications such infection, non-healing or delayed healing, and the atypical scar after healing. When applied locally, Jatyadi Tail preparation produced positive benefits by reducing the size of the wound, accelerating healing, and requiring fewer healing days than Povidone Iodine. The phyto-medicinal therapy is easy to use and obtain and has few side effects. The Jatyadi taila has been clinically proven to have antibacterial, anti-inflammatory, analgesic, and other properties. Tannins, berberine, anthraquinones, glycosides, vitamin A, ascorbic acid, and other chemical components of these medications. possess anti-inflammatory, antibacterial properties which play key role in the process of wound healing.

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