



“CRITICAL EVALUATION OF VRAN DHOOPAN CHIKITSA IN DUSHTA VRAN: AN AYURVEDIC PERSPECTIVE.”

¹Dr. Kiran Pundlikrao Mendhekar. ²Dr. Sanjeev R. Yadav.

¹ Ph.D. Scholar ² Professor and Dean

Department of Shalyatantra

Dr. G. D. Pol foundation's, Y.M.T. Ayurved Mahavidyalay, Kharghar, Navi Mumbai,
Maharashtra, India

Abstract : *Dhoopana Karma* is time honoured treatment modality mentioned in various *Ayurvedic* scriptures to maintain disease free hygienic environment in the world. As per *Ayurved*, *Dhoopana* is indicated for *Rakshoghna Karma* which means killing of disease producing microorganisms. Hence, it plays key role in prevention and cure of various infectious diseases. *Acharya Sushruta* explained *Vran* (wounds and ulcers) and their management in detail in the form of *Shashti Upakrama* in his text *Sushruta Samhita*. Amongst them, *Vran dhoopana* is one of the most innovative and minimal invasive treatment modality introduced by him to reduce intense pain and profuse wound discharge which ultimately promotes wound healing. *Vran* is the one which have been managed by human being from earlier phase of civilization. They came across the injury by different sources responsible to develop various type of wounds. All the chronic and non-healing ulcers associated with with slough, foul smell, discharge are considered as *Dushta Vran*. Such wounds with profuse putrefied pus along with blood, abnormal colour, intense pain delay in wound healing. *Dushta Vran* is the one which needs treatment for healing. The current study is an attempt to collate the references of *Vran Dhoopana yog* illustrated in chiefly *Brihatrayee* which are said to be effective in reduction of wound pain and discharge and can ultimately help to achieve wound healing.

Key words - *Vran, Vran Dhoopana, Dhoopana Karma, Dushta Vran, Wound healing*

I. INTRODUCTION

Vran Dhoopana (wound fumigation) in *Ayurveda* is primarily used for its antimicrobial properties to disinfect and promote healing in infected wounds. The fumigation involves burning medicinal herbs, which release smoke that has antiseptic, antibacterial, and healing properties. This helps to cleanse the wound, reduce infection, and promote faster healing.

The various factors are responsible for making wounds unhealthy and ultimately affecting the patient's health, in spite of good nutritional status, surgical and medical care which includes the various pathological microorganisms in the environment. A word *Dushta vran* will itself defines as a wound which is difficult to heal, having foul smell, severe pain, different shapes and sizes contaminated with vitiated *Doshas*.¹

In modern perspective, wound is break in the continuity of body structure caused by internal & external factors. Wound healing is body's natural defense mechanism which can heal faster if it is clean with minimum scar tissue formation as compared to contaminated wounds.

In *Shalyatantra*, concept of *Dhoopana karma* i.e. fumigation, a type of sterilization of environment i.e. wards, operation theatres, instruments, linen, wounds etc. can be done to avoid the nosocomial infections in the Indoor patients which has been mentioned in *Vranitopasaniya Adhyay*. In the same context, *Acharya's* have explained the concept of *Vran dhoopana* for the better recovery from *Dushta vran*.²

Dhoopana Karma of *Vran* has been explained as 34th *upakrama* in *Shashti upakrama* by *Sushrutacharaya* and 32nd amongst 36 *upkrama* by *Charakacharaya* as basic principle modality for healing of wounds and ulcers. *Acharya Charaka* has indicated that *Dhoopana* should be done for *Arishtagara* (Intensive care unit) *Vastra, shayya, Asanadi* of *Bala* (cloths, bed and other equipment of children) to avoid Neonatal sepsis.⁵

In context of *Vran*, he used *mardavkar dhoop* to deslough the *dushta Vran*,⁶ while *Sushrutacharaya* used it to reduce vitiated *Vata dosha*, *Vran Vedana* (severe pain) and *Vran srava* (wound discharge).⁴

The current study is an attempt to elaborate *Vran Dhoop Kalpas* mentioned in *Sushrut Samhita* which said to be effective in the management of *Dushta Vran*; ^{2,3}

II. AIM

To study ancient literature of *Vran Dhoopana* mentioned in *Brihatrayee* along with enlisting common herbal compound recommended for *Vran dhoopana*.

III. MATERIAL AND METHOD:

The learning resources for the current study were ancient texts along with *Charak Samhita, Sushruta Samhita, Astanga Hridaya*, Textbooks on orthopaedic & various articles, websites, authentic books, research publications,

3.1 Conceptual study on *Dhoopana Karma*:

Ancient culture has given utmost importance to *Dhoopana* because of its unique impact on spiritual and mental health along with its

medicinal and therapeutic aspects. Evolution of *Dhoopan Karma* is mentioned in *Shalyatantra* and it has been included in *trividhakarma* i.e. *Poorva karma*, *Pradhan karma*, *Paschat karma* of *shastra karma*.¹ *Shalya karma mandir* i.e. *Vranitagar* must be fumigated and disinfected to avoid infections or wound sepsis as per the reference mentioned by *Sushrutacharya* in the *Dhoopan Karma* of *Shalya Karma Mandir* before surgery in *Vranitopasaniya Adhyaya*.¹ *Vran Dhoopan Karma* earlier was introduced by *Sushrutacharya* to reduce vitiated *Vata dosha*, *Vrana Vedana* (severe pain) and *Vran srava* (wound discharge).²

It has been explained by *Dalhanacharya* as *rakshoghna karma* originating the concept of asepsis and antisepsis in *Ayurved*, *Dhoopan Karma* was done not only of *Vran* but also of *shayya* (patient's bed) to destroy foul smell of wound in order to kill and prevent the growth of microorganism and attack of ants, insects and mosquitos.^{1,5} Description of *Vran Dhoopan* i.e. local fumigation of wound in ancient texts categorized as *Dhoop* as per *Acharya Kahshyap*, as per the area of exposure by *Acharya Sushrut* and action on wound as per *Acharya Charak*.^{5,7}

3.2 Conceptual study on disease:

Sushrutacharya has elaborated *vran* as *gatra vichurnan* or destruction of body tissue. The scar wound never disappears and leave its imprints throughout the life. Pathogenesis of *Dushta Vran* follows six stages of *samprapti* which leads to the formation of chronic non healing wound. *Dushta vran* is said to have The wound having profuse discharge and tremendous pain is said to have *Vata dosh pradhanta*, so called *vat prodoshaj vran*.¹ *Dushta vran* is said to extremely narrow or wide mouthed, mushy, elevated or depressed, black or red or white colored, too cold or hot, full of slough or pus or veins or flesh or ligaments or putrid pus, upward or oblique course of suppuration, pus formation in to cavity and fissures cadaverous smell, burning sensation.^{1,2}

In modern science, factors responsible for non healing wound are ischemia, hypoxia, diabetes mellitus, vascular insufficiency, immunity of the host, neuro insufficiencies, neoplasia, metabolic factors, repeated trauma and pressure all in association with increasing age makes the prognosis of non healing ulcers difficult. Neutrophils release inflammatory cytokines to fight against pathogens and release ROS (Reactive Oxygen Species) to kill microbes, but the myeloperoxidase which they produce is lethal to both microbes and host cells. Damage to DNA, lipids, proteins and extra-cellular matrix of host cells. Presence of neutrophils for prolonged duration in chronic wound enriches it with higher level of inflammatory cytokines. Even the wound discharge contain excess of proteases and ROS, hence this fluid itself may inhibit cell growth by breaking down factors in extracellular matrix.⁹ This protease imbalance, together with ischemia and bacterial load make up to what is described in *Ayurved* as *Dushta Vran*.

A treatment modality of a chronic ulcer should improve circulation, inhibit bacterial flora, improve oxygen availability, remove dead tissue (debridement), warm and moist the tissue, should have anti-inflammatory properties, remove blood and organic exudates, reduce edema and decompress tissue. Ultimately the wound will heal by tissue regeneration or repair¹¹

3.3 Vran Dhoopan Yog in Brihattrayee:12

Table 3.3 Vran Dhoopan Yog

Sr. no.	Reference	Vran Dhoop Yog	Mode of action
1	<i>Charak Samhita</i> Chi.25/42, 108-109,	<i>Vran mardavkar Dhoop</i>	For scar tissue formation and soothing of wound tissue. Relieves pain, discharges, foul odour, parasites infesting the ulcer excessive looseness of tissue.
2	<i>Sushrut Su.5/18</i>	<i>Guggulu, Agar, Sarjarasa, Vaca, Sarsapa, Lavana with Ghrita</i>	Fumigation of wound along with beds etc. in Postoperative phase for removal of foul odor and flies
3	<i>Sushrut Su.36/22</i> <i>Sushrut Chi 1/8, 80</i>	<i>Shriveshaka, Sarala, Devadaru, Sarjarasa Guggulu, Yava, Ghrita. Kshuma, Yava along with Salasaradi gana</i>	Reduction of <i>Vran Vedana</i> and <i>Vran Srav Vataj Dosha, vran vedana</i> and <i>vran srav</i>
4	<i>Ashtang sangraha 38/20</i>	<i>Guggulu, Agar, Sarjarasa, Vacha, Gaura-Sarsapa, Hingu, Lavana, Neem & Ghee</i>	Post operative wound care
4	<i>Ashatang Hriday Su.29/26.</i>	<i>Guggulu, Agar, Sarsapa, Hingu, Sarjarasa, Vaca, Nimba, Lavana with Ghrita</i>	Postoperative wound care
5	<i>Ashtang Hriday Utt.25/45</i>	<i>Yava, Bhurjapatra, Moma, Devadaru, Shriveshaka with Ghrita</i>	Reduces <i>vran srav</i> and <i>vran vedana</i> in <i>Vat pradoshaj vran</i>

IV Review on mode of action of Vran dhoopan Karma from Ayurved prespective:

Dhoopan has been explained as *Vranitarthak Adhidaivik upchar* in *Vranitopasaniya adhyay*.¹

Sarsaradi gana- for *Vran Dhoopan* has been chiefly mentioned. (*ahakarna, khadir, kadar, kalskandha, kramuk, shyonak, meshshrungi, shinshapa, shirish, asan, dhav, Arjun, tal, naktamal, putik, chirbilva, asvakran, agar, kalaiyak* has the excellent property as *kushthaghna, meh* and *pandughna* and with *kapha* and *meda* suppression activity)¹

Dhoopan of *Gandhabiroja* (*Shreevas*) + *Shalniryas* (*Mardavakar dhoop*) and *Devadaru* can be used to manage the wound having profuse discharge and severe pain (reduce *vran srav* and *vedana*)^{1,6}

The *Dhoopana dravyas* like *Yava, Atatsi* are mentioned to be *Krumighna* i.e. Anthelmintic in various *Samhitas* and *Nighantus*.^{2,10} *Goghrita* (Cow Ghee) is essential for combustion of these constituents.

The *Dhoopan Karma* i.e. local fumigation of *Dushta Vran* i.e. infected wound reduces wound discharge i.e. *Vran srav* by reducing

Twaksthit Bhrajak Pitta under the influence of which causes healing by reducing moisture content with *Agni mahabhootadhikya* in the wound.⁶

Dhoopan of *Yav*, *Bhojapatra*, *Madan*, *Gandhabiroja* and *Devdaru* can be used to manage the wound having profuse discharge and severe pain.^{8,6}

As mentioned in *Ayurvedic* scriptures *Brihatrayee* comprise of a variety of *Dhoopana Kalpanas* aimed at promoting overall health and wellness, combating diseases and even purifying the environment. These formulations have been used widely since long. The *Dhoopana Dravyas* mentioned in the *Brihatrayee* have significant ability to mitigate the various diseases and for sterilization in an economical and eco-friendly way without developing any drug-resistant microorganisms and promotes faster wound healing.¹² It has a characteristic to reduce chiefly pain and excessive wound discharge. *Vran Dhoopan karma* helps in reduction of Infection due to its antimicrobial properties,¹³ Purification of the Wound by eliminating toxins and pus, promoting a cleaner wound bed, reduction of Foul Smell, accelerates Healing By reducing infection and purifying the wound. The anti-inflammatory properties of the herbs used for *Vran Dhoopan* helps to accelerate the healing process, leading to quicker recovery by reducing inflammation and pain followed by prevention of Further Infection

V. Conclusion:

Minimal Side Effects: Compared to synthetic dressings, herbal fumigation might produce fewer side effects, especially for individuals with sensitive skin or allergies to chemical antiseptics.

Cost-Effectiveness/Affordable and Accessible: Herbs used in *Dhoopan* are often more affordable and accessible, particularly in rural areas where access to medical supplies. This could make *Dhoopan* a practical alternative for low-resource settings.

Sustainable Practice: As a natural remedy, *Dhoopan Karma* may have a lower environmental impact compared to chemical antiseptics, making it a more sustainable choice.

Further Scope of Study:

It is necessary to undergo detailed study to identify the bioactive chemical properties of the formulations and establish their safety and efficacy profiles. Standardizing, characterizing and marketing these *Dhoopan* formulations is the need of the hour to bring a natural eco-friendly and cheap tool to combat microbes and prove the calibre of *Ayurved* formulations up to the greater extent for wound healing.

Acknowledgment:

I would like to express my gratitude to my Guide Dr. Sanjeev Yadav sir for the inspiration and guidance about this research work. I would like to express my appreciation to Dr. S.V. Kashikar sir for his valuable suggestions during planning of this research work. I am also immensely thankful to Dr. Ragini Patil maam for her continuous support and encouragement. My Heartfelt thanks to Dr. Shubhangi Badole maam for her valuable guidance and continuous motivation in the course of my research study.

REFERENCES

- [1] Sharma DrA. *Sushrutsamhita. Sushrutvimarshini Hindi commentary Vol 1 Sutrasthana*; 1/3-6-7, 5/8 & 9 p39, 5/18 p42, 17/5-34-21, 19/24 p164, 19/28 p165, 21/27-28-32-33-40 p189, 22/6-8 p191-192, 22/7 p192, 22/8&9, 22/11, 38-p295
- [2] Sharma Dr A. *Sushrutsamhita . Sushrutvimarshini Hindi commentary Vol II Chikitsa sthana*; 1/4-8, 2/8, 1/80, 2/86 & 87, 1/119, 2/46, 6/69.
- [3] Sharma DrA. *Sushrutsamhita. Sushrutvimarshini Hindi commentary Vol III Uttartantra*; 19/23, 60/30
- [4] Sharma DrA, editor. *Sushrut samhita Hindi vyakhaya. Chaukhamba Subharti Prakashan Varanasi* ; 2009. Chi.40/19
- [5] Charak samhita Sharirsthana. *Chaukhamba Subharti Prakashan Varanasi* ; 2013. 8/6 pg.no804
- [6] Kanjiv Lochan, Shri Govinda Dasji, Bhaisajya Ratnavali, English translation Vol 2, published by Chaukhambha Sanskrit Samsthan, Varanasi, Reprint 2009: 48 P 849.
- [7] Sharma PH, editor. *Kashyap samhita, Vriddha jivakiya tantra, Nepalrajgurunam Kalpasthana 1,5, Dhopakalpa adhayaya* p168, Dvivraniya chikitsa
- [8] Tripathi DrB, editor. *Vagabhata, Ashtang Hridaya. Chaukhamba Subharti Prakashan Varanasi* ; 2007. 2/35, 5/39
- [9] Ukaegbu K, Allen E, Svoboda KKH. Reactive Oxygen Species and Antioxidants in Wound Healing: Mechanisms and Therapeutic Potential. *Int Wound J.* 2025 May;22(5):e70330. doi: 10.1111/iwj.70330. PMID: 40288766; PMCID: PMC12034374.
- [10] Chuneekar Prof.K, Shreemad Bhavmishrapranit Bhavprakash Nighantu, Chaukhamba Bharati Academy, 2015, Varanasi 22100115) Kaithwas G, Mukerjee A, Kumar P, Majumdar DK Linum usitatissimum (linseed/flaxseed) fixed oil: antimicrobial activity and efficacy in bovine mastitis. Department of Pharmaceutical Sciences, F.H.M.S, Allahabad Agricultural Institute-Deemed University, Allahabad 211007, U.P., India.
- [11] Das S, A concise text book of surgery; S. Das publication, Calcutta, 7th ed, 2012
- [12] Sahara S.: *Dhoopana Karma: A Review Through Brihatrayi*. International Ayurvedic Medical Journal 2017
- [13] Kiran P. Mendhekar, Yogesh B. Shinde, Shrikant V. Kashikar, Sanjeev R. Yadav. A critical Review of Dhoopan Karma in Ayurveda and Dhoopana of an Ayurvedic Herbomineral formulation Yavasarsapadi churna in context of Sterilization. *Research Journal of Pharmacy and Technology.* 2021; 14(11):6095-0. doi: 10.52711/0974-360X.2021.01059