

|                                                                                                                         |                                                                                                                                                    |                          |
|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|  <p>International Journal of AYUSH</p> | <h1>IJAYUSH</h1>                                                                                                                                   | <p>ISSN: 2349-7025</p>   |
|                                                                                                                         | <h2>International Journal of AYUSH</h2>                                                                                                            | <p>OPEN ACCESS</p>       |
|                                                                                                                         | <p>AYURVEDA • YOGA • UNANI • SIDDHA • HOMEOPATHY</p>                                                                                               | <p>★ PEER REVIEWED ★</p> |
|                                                                                                                         | <p><a href="https://internationaljournal.org.in/journal/index.php/ijayush/">https://internationaljournal.org.in/journal/index.php/ijayush/</a></p> | <p>MONTHLY</p>           |
| <p>Review Article</p>                                                                                                   | <p>Volume 15 Issue 07</p>                                                                                                                          | <p>July 2026</p>         |

## UNDERSTANDING *DUSHTAVRANA*: AN *AYURVEDIC* CONCEPTUAL REVIEW

Dr. Saurabh Bansode<sup>1</sup>, Dr. Yogita Bhaskar Watpade<sup>2</sup>, Dr. Saurabh Kumar<sup>3</sup>

<sup>1</sup>PG Scholar, P.G. Dept of Shalya Tantra, Shri Dhanwantari Ayurvedic Medical College and Research Centre, Mathura, 281401

<sup>2</sup>Guide & Professor, P.G. Dept of Shalya Tantra, Shri Dhanwantari Ayurvedic Medical College and Research Centre, Mathura, 281401

<sup>3</sup>Supervisor, Professor & HOD, P.G. Dept of Shalya Tantra, Shri Dhanwantari Ayurvedic Medical College and Research centre, Mathura, 281401

**Corresponding Author** - Dr. Saurabh Bansode, PG Scholar, P.G. Dept of Shalya Tantra, Shri Dhanwantari Ayurvedic Medical College and Research Centre, Mathura, 281401

**Email id** - [Bsaaurabh2915@gmail.com](mailto:Bsaaurabh2915@gmail.com)

### ABSTRACT

**Background** *Dushtavrana* is one of the most important surgical conditions described in *Ayurveda*, representing a chronic or non-healing wound resulting from vitiation of the *Doshas*, contamination, tissue destruction, and impaired wound healing. *Acharya Sushruta*, regarded as the Father of Surgery, has described *Vrana* and its management in great detail, emphasizing that proper wound healing depends upon balanced *Doshas*, healthy *Dhatus*, adequate nutrition, and appropriate local care. When these factors become disturbed, the wound develops unhealthy characteristics such as pain, swelling, foul discharge, discoloration, slough formation, unhealthy granulation tissue, and delayed healing, collectively termed *Dushtavrana*. The classical principles of *Vrana Shodhana*, *Vrana Ropana*, *Shastra Karma*, and *Rasayana Chikitsa* provide a comprehensive approach for wound management, many aspects of which closely resemble modern concepts of chronic wound care. **Aim** To review the classical concept of *Dushtavrana* and its management according to *Ayurveda* and correlate it with modern concepts of chronic wound healing. **Objectives** To review the concept of *Dushtavrana* described in *Ayurvedic* classics. To understand its etiopathogenesis, clinical features, diagnosis, and management. To correlate *Dushtavrana* with modern concepts of chronic wounds. **Materials and Methods** The present conceptual review was carried out by studying classical *Ayurvedic* texts including *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and *Madhava Nidana*. Standard surgical textbooks and published scientific literature related to chronic wound healing were also reviewed. The collected information was critically analyzed and interpreted. **Results & Discussion** The concept of *Dushtavrana* closely resembles the modern understanding of chronic infected wounds. Integration of classical *Ayurvedic* wound management principles with evidence-based modern care may improve healing outcomes and reduce complications. **Conclusion** *Ayurveda* provides a holistic approach to wound management through local cleansing, tissue regeneration, correction of systemic pathology, and promotion of natural healing. Early identification and appropriate management of *Dushtavrana* can significantly improve wound healing and quality of life.

**Keywords:** *Dushtavrana*, *Vrana*, *Vrana Shodhana*, *Vrana Ropana*, Chronic Wound, *Ayurveda*

## Introduction

*Vrana* is one of the oldest and most extensively described surgical conditions in *Ayurveda*. *Acharya Sushruta* devoted an entire section of the *Sushruta Samhita* to the classification, diagnosis, prognosis, and management of wounds, highlighting their immense clinical importance. According to *Ayurveda*, successful wound healing depends upon the equilibrium of *Doshas*, healthy *Dhatus*, proper circulation, adequate nutrition, and meticulous wound care. Disturbance of these physiological factors transforms a healthy wound into *Dushtavrana*, which is characterized by delayed healing, excessive discharge, foul odor, unhealthy granulation tissue, and tissue destruction.<sup>1</sup>

*Dushtavrana* develops due to both external and internal factors. Trauma, burns, foreign bodies, improper wound dressing, and surgical contamination constitute important external causes, whereas *Tridosha* vitiation, *Rakta Dushti*, chronic systemic diseases, diabetes (*Madhumeha*), malnutrition, poor immunity, and unhealthy dietary habits contribute as internal etiological factors. These factors impair the normal process of tissue repair and prolong the inflammatory phase of wound healing, ultimately resulting in chronic, infected, and non-healing wounds.<sup>2</sup>

Chronic wounds continue to represent a major public health challenge because of prolonged treatment, recurrent infections, increased healthcare costs, and significant impairment of quality of life. Conditions such as diabetic foot ulcers, pressure ulcers, venous ulcers, arterial ulcers, traumatic infected wounds, and postoperative wound infections share many clinical features with *Dushtavrana*. The classical principles of *Vrana Shodhana*, *Vrana Ropana*, *Shastra Karma*, and *Rasayana Chikitsa* described in *Ayurveda* provide a scientific and holistic framework for understanding and managing these chronic wounds, making the concept of *Dushtavrana* highly relevant in contemporary surgical practice.<sup>3</sup>

## Aim & Objectives

### Aim

To review the concept of *Dushtavrana* according to classical *Ayurvedic* literature and correlate it with modern concepts of chronic wound management.

### Objectives

1. To review the concept and definition of *Dushtavrana*.
2. To study its etiological factors, pathogenesis, clinical features, and diagnosis.
3. To review the principles of *Ayurvedic* management of *Dushtavrana*.
4. To correlate the *Ayurvedic* concept of *Dushtavrana* with modern chronic wound healing.

## Materials and Methods

The present conceptual review was carried out by critically reviewing classical *Ayurvedic* texts including *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and *Madhava Nidana*, along with authentic commentaries and standard textbooks of *Shalya Tantra*. Modern surgical textbooks, peer-reviewed review articles, and published scientific literature related to wound healing, chronic ulcers, tissue repair, infection, and regenerative medicine were also consulted. The collected information was systematically compiled, critically analyzed, and interpreted to understand the concept of *Dushtavrana* from both classical and contemporary perspectives.<sup>4</sup>

## Ayurvedic Review

### Concept of *Vrana*

*Vrana* is one of the most important disease entities described in *Ayurveda*, particularly in *Shalya Tantra*. *Acharya Sushruta* has defined *Vrana* as the discontinuity or destruction of body tissues produced by internal or external causes. The term *Vrana* is derived from the root "*Vri*" meaning destruction, injury, or loss of continuity of body tissues. Depending upon the causative factors, tissue involvement, and severity, *Vrana* may heal normally or progress towards chronicity. Proper healing requires healthy *Doshas*, normal *Dhatus*, unobstructed *Srotas*, adequate blood supply, and appropriate wound management. Disturbance of these physiological factors predisposes the wound to delayed healing and conversion into *Dushtavrana*.<sup>5</sup>

## Definition of *Dushtavrana*

*Dushtavrana* refers to an unhealthy, contaminated, infected, or non-healing wound resulting from vitiation of the *Doshas*, contamination of tissues, and impairment of the normal wound-healing process. Classical texts describe *Dushtavrana* as a wound exhibiting excessive pain, swelling, foul smell, unhealthy discharge, discoloration, slough formation, irregular margins, unhealthy granulation tissue, and delayed healing. Such wounds require both local and systemic treatment for restoration of normal tissue integrity.<sup>6</sup>

## Etiology (*Nidana*) of *Dushtavrana*

The causative factors responsible for the development of *Dushtavrana* can be broadly classified into external, internal, dietary, and behavioral factors.

**External Causes** External trauma remains the most common cause of *Vrana*. Mechanical injuries, burns, animal bites, insect bites, accidental wounds, surgical wounds, retained foreign bodies, repeated trauma, and improper wound dressing contribute to contamination and delayed healing. Poor local hygiene further aggravates tissue destruction and infection.

## Internal Causes

Several systemic conditions predispose a wound to become *Dushtavrana*. These include *Tridosha* vitiation, *Rakta Dushti*, *Madhumeha*, chronic fever, anemia, malnutrition, diminished immunity, and chronic debilitating disorders. Such conditions reduce tissue resistance and interfere with the normal phases of wound healing.

## Dietary Causes

Consumption of incompatible foods (*Viruddha Ahara*), excessive intake of dry food, stale food, excessively spicy food, heavy-to-digest diet, and nutritionally deficient food weakens tissue metabolism and delays wound repair.

## Behavioral Causes

Improper wound care, suppression of natural urges, inadequate sleep, excessive physical exertion, psychological stress, smoking, alcohol consumption, and poor personal hygiene negatively influence wound healing and increase the risk of chronic infection.<sup>7</sup>

## Classification of *Vrana*

According to *Ayurveda*, *Vrana* is classified in several ways.

### According to Origin

- *Nija Vrana*
- *Agantuja Vrana*

### According to Healing

- *Shuddha Vrana*
- *Dushtavrana*

### According to *Dosha* Predominance

- *Vataja Vrana*
- *Pittaja Vrana*
- *Kaphaja Vrana*
- *Raktaja Vrana*
- *Sannipataja Vrana*

## Pathogenesis (*Samprapti*) of *Dushtavrana*

The development of *Dushtavrana* begins with tissue injury produced by external trauma or internal pathological processes. Following injury, *Dosha* vitiation occurs due to contamination, improper wound

care, systemic illness, or nutritional deficiency. Vitiated *Doshas* affect *Rakta*, *Mamsa*, and other *Dhatus*, leading to inflammation, tissue necrosis, impaired circulation, and obstruction of *Srotas*. As a result, healthy granulation tissue fails to develop, exudate accumulates, microbial contamination increases, and wound healing becomes progressively delayed. Continuous *Dosha* aggravation ultimately produces the classical features of *Dushtavrana*.<sup>8</sup>

### **Role of *Doshas* in *Dushtavrana***

#### ***Vata Dosha***

Aggravated *Vata* produces severe pain, dryness, irregular wound margins, blackish discoloration, tissue contraction, delayed granulation, and delayed healing.

#### ***Pitta Dosha***

Predominant *Pitta* causes redness, increased local temperature, burning sensation, yellowish discoloration, purulent discharge, foul odor, bleeding tendency, and rapid tissue destruction.

#### ***Kapha Dosha***

Vitiated *Kapha* produces excessive itching, heaviness, pale unhealthy granulation tissue, profuse thick discharge, edema, sluggish healing, and excessive tissue moisture.

#### ***Rakta Dushti***

Vitiation of *Rakta* leads to discoloration, persistent inflammation, bleeding, infection, delayed epithelialization, and impaired tissue regeneration.

### **Clinical Features (*Lakshana*) of *Dushtavrana***

Classical texts describe several characteristic manifestations of *Dushtavrana*, including:

- Severe pain (*Vedana*)
- Swelling (*Shotha*)
- Excessive discharge (*Srava*)
- Foul smell (*Durgandha*)
- Burning sensation (*Daha*)
- Itching (*Kandu*)
- Discoloration
- Unhealthy granulation tissue
- Slough formation
- Irregular wound margins
- Tissue necrosis
- Delayed wound healing
- Bleeding
- Sinus formation
- Induration

### **Features of Healthy *Vrana* (*Shuddha Vrana*)**

A healthy healing wound possesses the following characteristics:

- Clean wound surface
- Healthy pink granulation tissue
- Minimal discharge
- Absence of foul smell

- Minimal pain
- Progressive wound contraction
- Healthy epithelialization
- Absence of slough
- Normal surrounding skin
- Gradual restoration of tissue continuity

### **Prognostic Factors**

Healing of *Dushtavrana* depends upon several local and systemic factors.

### **Favorable Factors**

- Young age
- Good nutritional status
- Healthy immunity
- Small wound size
- Adequate blood circulation
- Early treatment
- Proper wound care

### **Unfavorable Factors**

- *Madhumeha*
- Malnutrition
- Chronic infection
- Peripheral vascular disease
- Large tissue defects
- Immunosuppression
- Repeated trauma
- Poor hygiene

### **Diagnostic Principles**

Diagnosis of *Dushtavrana* is primarily clinical and includes careful examination of:

- Site of wound
- Size and depth
- Shape
- Wound margins
- Base of wound
- Type and quantity of discharge
- Odor
- Color
- Granulation tissue
- Presence of necrosis
- Pain
- Surrounding skin changes

- Sinus or undermining<sup>10</sup>

### Principles of Management (*Chikitsa Siddhanta*)

Management of *Dushtavrana* aims to eliminate pathological factors, promote healthy granulation tissue, prevent infection, and accelerate wound healing.

The major treatment principles include:

- *Vrana Shodhana*
- *Vrana Ropana*
- *Shastra Karma*
- *Kshara Karma*
- *Agni Karma*
- Internal *Shamana Chikitsa*
- *Rasayana Chikitsa*
- Proper *Pathya-Apathya*<sup>11</sup>

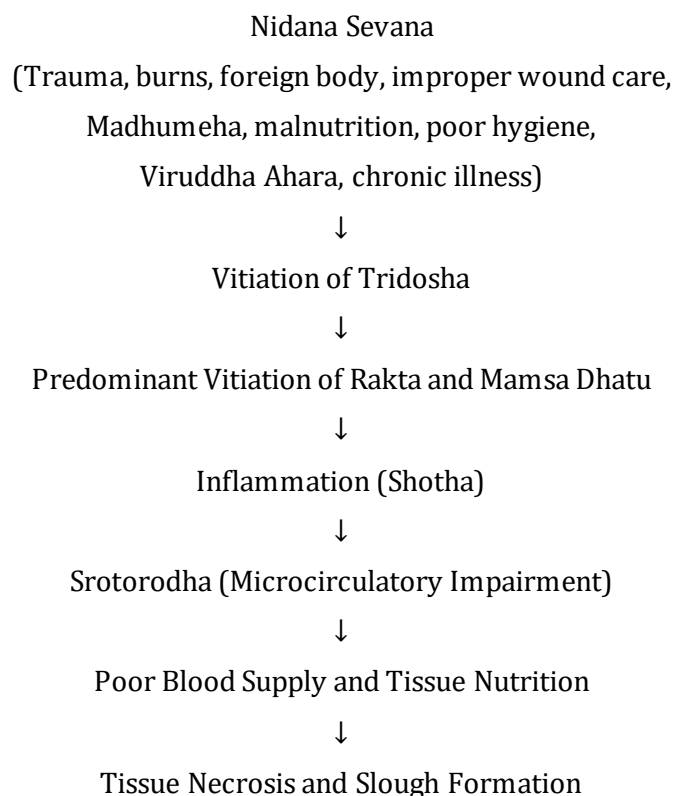
### *Vrana Shodhana*

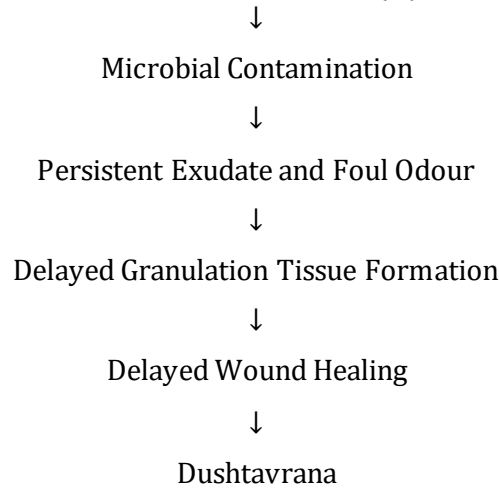
*Vrana Shodhana* is the initial stage of wound management aimed at cleansing contaminated wounds and removing slough, necrotic tissue, pus, foreign bodies, and unhealthy secretions. Various methods described in *Ayurveda* include *Prakshalana*, *Parisheka*, *Lepa*, *Varti*, *Dhupana*, and *Shodhana Taila*. Proper wound cleansing reduces microbial contamination, controls inflammation, improves local circulation, and prepares the wound bed for healthy granulation tissue formation.

### *Vrana Ropana*

Following adequate wound cleansing, *Vrana Ropana* therapy promotes tissue regeneration and wound closure. Classical formulations such as *Jatyadi Taila*, *Madhu*, *Ghrita*, *Panchavalka Kwatha*, *Yashtimadhu*, *Nimba*, *Haridra*, and *Guduchi* enhance collagen formation, epithelialization, angiogenesis, and scar maturation. These therapies restore tissue integrity while minimizing complications and recurrence.<sup>12</sup>

### *Samprapti of Dushtavrana*





## Results and Findings

- *Dushtavrana* is a chronic pathological condition resulting from persistent *Dosha* vitiation, tissue destruction, microbial contamination, and delayed wound healing.
- *Tridosha*, particularly *Pitta* and *Kapha*, along with *Rakta* and *Mamsa Dhātu* involvement, play a significant role in the development and progression of *Dushtavrana*.
- Proper *Vrana Shodhana* is essential for removing slough, necrotic tissue, unhealthy discharge, and microbial contamination before initiating healing.
- *Vrana Ropana* promotes healthy granulation tissue formation, epithelialization, collagen synthesis, and restoration of tissue integrity.
- Classical *Ayurvedic* procedures such as *Prakshalana*, *Parisheka*, *Lepa*, *Dhupana*, *Varti*, and *Shodhana Taila* contribute significantly to wound cleansing and infection control.
- *Ayurvedic* drugs including *Madhu*, *Jatyadi Taila*, *Haridra*, *Guduchi*, *Nimba*, *Yashtimadhu*, and *Panchavalka* possess antimicrobial, anti-inflammatory, antioxidant, and wound-healing properties.
- Proper nutrition, correction of systemic disorders, maintenance of healthy *Agni*, and enhancement of immunity accelerate wound healing and reduce recurrence.
- The *Ayurvedic* concept of *Dushtavrana* closely corresponds with modern chronic infected wounds such as diabetic foot ulcers, venous ulcers, pressure ulcers, traumatic infected wounds, and postoperative wound infections.

## Discussion

The present review demonstrates that *Ayurveda* provides a comprehensive understanding of wound healing through the concepts of *Vrana*, *Dushtavrana*, *Dosha* vitiation, and tissue regeneration. According to *Acharya Sushruta*, wound healing depends upon the maintenance of healthy *Doshas*, normal *Dhatus*, proper circulation, adequate nutrition, and meticulous wound care. Disturbance of these physiological factors results in persistent inflammation, tissue necrosis, microbial contamination, and delayed healing, ultimately leading to *Dushtavrana*. The detailed description of its etiological factors, clinical features, prognosis, and treatment principles reflects the advanced surgical knowledge of classical *Ayurveda*.<sup>15</sup>

The principles of *Vrana Shodhana* and *Vrana Ropana* described in *Ayurveda* show remarkable similarity with contemporary wound management practices. Wound cleansing, removal of necrotic tissue, infection control, promotion of healthy granulation tissue, and restoration of tissue integrity are common objectives in both systems of medicine. Several classical formulations, including *Madhu*, *Jatyadi Taila*, *Haridra*, *Guduchi*, *Nimba*, and *Yashtimadhu*, have demonstrated antimicrobial, anti-inflammatory, antioxidant, collagen-promoting, and angiogenic activities in experimental and clinical studies, supporting their traditional use in chronic wound management.

The review further indicates that successful management of *Dushtavrana* requires both local and systemic approaches. Along with appropriate wound care, correction of *Dosha* imbalance, improvement

of nutritional status, maintenance of healthy *Agni*, and administration of *Rasayana Chikitsa* contribute to tissue regeneration and faster wound healing. Therefore, integration of classical *Ayurvedic* wound management principles with evidence-based modern surgical care may provide a safe, holistic, and effective strategy for the management of chronic wounds and their complications.<sup>16</sup>

## Conclusion

*Dushtavrana* is a well-defined chronic wound condition described comprehensively in classical *Ayurveda*. The disease develops due to *Dosha* vitiation, *Rakta* and *Mamsa Dhatu* involvement, microbial contamination, impaired circulation, and delayed tissue repair. The principles of *Vrana Shodhana*, *Vrana Ropana*, *Shastra Karma*, and *Rasayana Chikitsa* provide a scientific and holistic approach to wound management by promoting wound cleansing, controlling infection, enhancing tissue regeneration, and restoring normal healing. These concepts closely correlate with modern principles of chronic wound care. Therefore, integrating *Ayurvedic* wound management with contemporary evidence-based surgical practices may improve healing outcomes, reduce complications, and enhance the quality of life of patients suffering from chronic wounds.

**Conflict of Interest** -Nil.

**Source of Support** -None.

## References

1. Acharya YT, editor. *Charaka Samhita* of Agnivesha with *Ayurveda Dipika* commentary of Chakrapanidatta. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan; 2023.
2. Acharya YT, editor. *Sushruta Samhita* with *Nibandha Sangraha* commentary of Dalhanacharya. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan; 2022.
3. Paradkar HSS, editor. *Ashtanga Hridaya* of Vagbhata with *Sarvangasundara* commentary. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan; 2022.
4. Upadhyaya Y, editor. *Madhava Nidana* with *Madhukosha* commentary. Reprint ed. Varanasi: Chaukhambha Prakashan; 2022.
5. Sharma PV. *Sushruta Samhita*. Vol. I. Varanasi: Chaukhambha Vishvabharati; 2021.
6. Sharma PV. *Charaka Samhita*. Vol. II. Varanasi: Chaukhambha Orientalia; 2020.
7. Tripathi B. *Ashtanga Hridayam*. Reprint ed. Delhi: Chaukhambha Sanskrit Pratishthan; 2022.
8. Srikantha Murthy KR. *Sushruta Samhita*. Vol. I. Varanasi: Chaukhambha Orientalia; 2020.
9. Das S. *A Manual on Clinical Surgery*. 16th ed. Kolkata: SD Publishers; 2022.
10. Bailey H, Love RJM, O'Connell PR, editors. *Bailey & Love's Short Practice of Surgery*. 28th ed. Boca Raton: CRC Press; 2023.
11. Brunickardi FC, Andersen DK, Billiar TR, Dunn DL, Kao LS, Hunter JG, Matthews JB, Pollock RE, editors. *Schwartz's Principles of Surgery*. 12th ed. New York: McGraw-Hill Education; 2022.
12. Kumar V, Abbas AK, Aster JC. *Robbins and Cotran Pathologic Basis of Disease*. 10th ed. Philadelphia: Elsevier; 2021.
13. Guyton AC, Hall JE. *Guyton and Hall Textbook of Medical Physiology*. 15th ed. Philadelphia: Elsevier; 2021.
14. Boron WF, Boulpaep EL. *Medical Physiology*. 4th ed. Philadelphia: Elsevier; 2022.
15. International Working Group on the Diabetic Foot. *IWGDF Guidelines on the Prevention and Management of Diabetic Foot Disease*. The Hague: IWGDF; 2023.
16. World Health Organization. *Global Guidelines for the Prevention of Surgical Site Infection*. 2nd ed. Geneva: World Health Organization; 2018.