

ROLE OF JALAUKAVCHARAN IN URDHWAJATRUGATA VIKARA- PICTORIAL REVIEW

Shruti Balkrishana Kulkarni¹, Vaishali Raghunath Chaudhari^{2*},

Pranesh Prakash Gaikwad³, Vindeep⁴

^{1,4}PG Scholar, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Pimpri, Pune, Maharashtra, India – 411018.

^{2*}Professor and HOD, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Pimpri, Pune, Maharashtra, India – 411018.

³Professor, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Pimpri, Pune, Maharashtra, India – 411018.

Article Received on 05 May 2026,

Article Revised on 25 May 2026,

Article Published on 01 June 2026

<https://doi.org/10.5281/zenodo.20439048>

*Corresponding Author

Vaishali Raghunath Chaudhari

Professor and HOD, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Pimpri, Pune, Maharashtra, India - 411018.



How to cite this Article: Shruti Balkrishana Kulkarni¹, Vaishali Raghunath Chaudhari^{2*}, Pranesh Prakash Gaikwad³, Vindeep⁴ (2026). Role of Jalaukavcharan in Urdhwajatrugata Vikara-Pictorial Review. World Journal of Pharmaceutical Research, 15(11), 434-442.

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Introduction: *Urdhwajatrugata Vikara* includes disorders affecting the region above the clavicle, involving vital sense organs such as eyes, ears, nose, and oral cavity. These conditions are commonly associated with *rakta dushti* and *pitta* predominance, presenting with symptoms like burning sensation, redness, swelling, and pain. *Jalaukavacharana*, a form of *raktamokshana* described in the *sushruta samhita*, is considered particularly suitable for such conditions due to its gentle and localized action. **Aim:** To evaluate and illustrate the role of *jalaukavacharana* in the management of *urdhwajatrugata vikara* through a pictorial review. **Materials and Methods:** This study is a descriptive pictorial review based on documented clinical cases of *jalaukavacharana* in *urdhwajatrugata* disorders. Clinical images were selected based on relevance, clarity, and proper depiction of the application

site. The procedure was performed according to classical *ayurvedic* guidelines using medicinal leeches (*Hirudo medicinalis*). Data were presented as categorized images with descriptive observations. Ethical considerations, including informed consent and patient anonymity, were maintained. **Results:** The pictorial documentation demonstrated the

application of *jalaukavacharana* at various anatomical sites such as periorbital, perioral, and temporal regions. Symptomatic relief was observed in conditions like stomatitis, dental pain, migraine, and facial inflammatory lesions, particularly in terms of reduction in pain, burning sensation, swelling, and redness. **Discussion:** *Jalaukavacharana* acts by removing vitiated *rakta* and pacifying *pitta dosha*, thereby alleviating inflammatory symptoms. From a modern perspective, bioactive components in leech saliva, such as hirudin, contribute to anticoagulant, anti-inflammatory, and vasodilatory effects. Its localized, minimally invasive nature makes it especially useful in delicate regions and in patients where surgical intervention is not feasible. **Conclusion:** *Jalaukavacharana* is a safe and effective parasurgical modality for managing *urdhwajatrugata vikara*, particularly in *rakta-pitta* predominant conditions. Further studies with standardized parameters are required to establish its efficacy more conclusively.

KEYWORDS: *Ayurveda, Panchakarma, Raktamokshana, Jalaukavacharan, Urdhwajatrugata vicar.*

INTRODUCTION

Urdhwanga chikitsa, known as *shalakya tantra*, is one of the eight classical branches of Ayurveda that deals with diseases affecting the region above the clavicle (*jatru*). This branch holds significant importance as it focuses on the preservation and management of vital sense organs situated in the *uttamanga* (head region), which include *netra* (eyes), *shrotra* (ears), *ghrana* (nose), and *rasana* (tongue). These organs are essential for perception and interaction with the external environment; hence, their protection and restoration are of utmost clinical priority. Disorders of the *urdhwajatrugata* region are commonly associated with *rakta dushti* and predominance of *pitta dosha*, manifesting as symptoms such as *daha* (burning sensation), *raga* (redness), *shopha* (swelling), and *vedana* (pain). In the management of these conditions, *shamana chikitsa* (conservative therapy) is generally adopted as the first line of treatment and may also be effective in the early stages of *shastra sadhya vyadhi*. However, when *shamana* therapy fails to yield satisfactory results, or when surgical intervention (*shastra karma*) is contraindicated due to factors such as patient sensitivity, pediatric age, fear of invasive procedures, lack of surgical facilities, or technical difficulty. Among the various parasurgical measures described in *sushruta samhita*, *raktamokshana* (bloodletting) is considered a key therapeutic approach for eliminating vitiated blood.^[1] Within its different modalities, *jalaukavacharana* is considered a highly gentle mode of bloodletting and is particularly

recommended for individuals of delicate constitution, including children, the elderly, women, weak and fearful persons, as well as those who are unable to tolerate more invasive procedures.^[2] It is especially indicated in *pitta* dominant disorders, as leeches possess *madhura rasa* and are naturally adapted to cold aquatic environments, thereby exerting a cooling and *pitta* pacifying effect.^[3]

AIM AND OBJECTIVE

Aim: To evaluate and illustrate the role of *jalaukavacharana* in the management of *urdhwajatrugata vikara* through a pictorial review.

Objectives

- To highlight the clinical indications of *jalaukavacharana* in diseases affecting the region above the clavicle.
- To assess the therapeutic relevance of *jalaukavacharana* in conditions associated with Rakta Dushti and Pitta predominance.
- To correlate classical Ayurvedic principles with practical clinical application of *jalaukavacharana*.
- To emphasize the role of *jalaukavacharana* as a safe and minimally invasive parasurgical procedure in delicate anatomical regions.

MATERIALS AND METHODS

The present work is a descriptive pictorial review intended to demonstrate the clinical utility of *jalaukavacharana* in the management of *urdhwajatrugata vikara*. The data for this review were derived from documented clinical cases where *jalaukavacharana* was administered as a therapeutic procedure for disorders involving the region above the clavicle.

Clinical images were selected based on their relevance to *urdhwajatrugata* conditions, adequate visual clarity, and clear representation of the site of leech application. The included cases primarily comprised disorders associated with *rakta dushti* and predominance of *pitta dosha*, wherein *jalaukavacharana* is traditionally indicated. Images that were unclear, not related to the *urdhwajatrugata* region, or lacking sufficient clinical documentation were excluded from the review.

The procedure of *jalaukavacharana* was carried out in accordance with classical Ayurvedic principles described in *Sushruta Samhita*.

Procedure of *jalaukavacharana*^[4]

1. Purvakarma

- a) Leeches (namely *Hirudo medicinalis*) collected and preserved.
- b) Examination of patient done.
- c) Shodhana of leech done.
- d) Preparation of patient done.

2. Pradhana Karma

The patient was positioned comfortably in either a sitting or supine posture. Prior to application, the leech was prepared using *haridra* and *sarshapa kalka* and was then kept in clean water to ensure that it was active and free from impurities. Once prepared, the leech was applied to the affected area.

If the leech failed to attach, a drop of milk was applied or a minor superficial prick was made to facilitate slight bleeding. If attachment still did not occur, another leech was used. After successful attachment, the leech was covered with a moist gauze, leaving its mouth exposed, and water was gently sprinkled to maintain a cool environment.

As the leech fed, its body gradually became distended, indicating active blood suction. It was observed that impure blood was drawn initially.

3. Paschata Karma

It consists of two main things,

- a) *Jalauka upachara*
- b) *Atura upachara*

a) *Jalauka upachara*

Immediately after removal from the affected site, *haridra* (turmeric) was applied over the mouth and body of the *jalauka*. The tail end of the leech was then gently held between the thumb and forefinger, and mild pressure was applied from tail towards the head to facilitate expulsion of the ingested blood. After this, the leech was placed in a vessel containing clean water. Its activity was observed to ensure complete evacuation of the sucked blood. If the leech appeared sluggish (*madayukta*), it was considered that complete expulsion had not occurred.

b) Atura Upachara

During blood suction, the anticoagulant property of hirudin present in leech saliva prevented clotting and facilitated smooth ingestion of blood. The physician observed the signs of adequate bloodletting throughout the procedure. After detachment of the leech, appropriate wound care was provided. *shatadhauta ghrita* or *madhu*, was placed over the site. Cold application was given, followed by proper bandaging.

In some cases, the wound was cleansed with *kashaya*, and medicated oils such as *jatyadi taila* or *padmakadi taila* were applied to promote healing.

➤ Pictorial Documentation of Jalaukavacharana Procedure

Figure 1: *Jalaukavacharana* in *Jeerna mukhapaka* (Stomatitis) Application of leech over perioral region.^[5]



Figure 2: *Jalaukavacharana* in *Upakusha* (Gingivitis) Application of leech over inflamed gums.^[6]



Figure 3: *Jalaukavacharana* in *Dantharsha-shula* (wisdom tooth pain) Application of leech over perioral region near to wisdom tooth.^[7]



Figure 4: *Jalaukavacharana* in *Netrabhishyanda* (Conjunctivitis) Application of leech over periocular region.^[8]



Figure 5: *Jalaukavacharana* in *Ardhvbhedak* (Migrain) Application of leech over temporal region.^[9]

All necessary ethical considerations were adhered to during the study. The procedure was performed under strict hygienic precautions. Informed consent was obtained from patients prior to capturing clinical photographs, and strict confidentiality was maintained by ensuring anonymity.

As this study is based on visual documentation and descriptive analysis, no statistical evaluation was performed. The findings are primarily observational and intended to demonstrate the practical utility of *Jalaukavacharana* in clinical settings.

DISCUSSION

Urdhwajatrugata vikara, involving the region above the clavicle, primarily affects vital sense organs and is often associated with vitiation of *rakta* and predominance of *pitta dosha*. These conditions commonly present with *daha* (burning sensation), *raga* (redness), *shopha* (swelling), and *vedana* (pain), indicating the involvement of inflammatory and vascular components. In such conditions, elimination of vitiated *rakta* plays a crucial role in the management. The present pictorial review highlights its practical application in various *urdhwajatrugata* disorders, demonstrating its versatility and clinical relevance. The therapeutic effect of *jalaukavacharana* can be understood through both *ayurvedic* and modern perspectives. From an *ayurvedic* viewpoint, *jalauka* helps in removing vitiated *rakta* and pacifying *pitta dosha*, thereby reducing symptoms such as burning, redness, and swelling. The leech facilitates removal of vitiated blood and pathological factors from the affected site. Leech saliva contains several bioactive substances, including hirudin, which exhibits potent anticoagulant activity, and calin, which inhibits platelet aggregation and prevents clot formation. Other components such as eglins and hyaluronidase contribute to anti-inflammatory and proteolytic effects.^[10] These pharmacological actions help in reducing pain, inflammation, and edema. The mild local irritation produced during leech application may stimulate tissue regeneration and aid in the removal of necrotic or damaged tissue. As a result, there is improvement in local circulation and restoration of normal tissue function. Additionally, leech therapy has been reported to exhibit immunomodulatory, anti-inflammatory, and antimicrobial effects, while also enhancing microcirculation and cellular exchange at the site of application. The pictorial evidence presented in this review demonstrates that *jalaukavacharana* can be effectively applied at various anatomical sites including the periorbital, perioral, and temporal regions. It was observed to provide symptomatic relief in conditions such as stomatitis, dental pain, migraine, and inflammatory

lesions of the face. Its ability to act locally makes it especially useful in regions where other forms of *raktamokshana* or surgical interventions may be difficult to perform. Another important advantage of *jalaaukavacharana* is its applicability in patients who are not ideal candidates for surgical procedures, such as pediatric patients, individuals with low pain tolerance, or those reluctant to undergo invasive interventions. In such cases, it serves as a safe and minimally invasive alternative under the category of *anushastra karma*.

However, as this study is based on pictorial and observational data, the findings are primarily descriptive in nature. The absence of quantitative assessment and standardized outcome measures limits the ability to draw definitive conclusions regarding efficacy. Further studies with larger sample sizes and objective evaluation parameters are required to validate these observations.

CONCLUSION

The findings of this pictorial review suggest that *jalaaukavacharana* holds considerable clinical relevance in the management of *urdhwajatrugata vikara*, especially in disorders characterized by vitiation of *rakta* and *pitta Dosha*. Its gentle, localized action makes it particularly suitable for application in sensitive regions above the clavicle. The visual documentation supports its role in alleviating symptoms such as pain, burning sensation, redness, and swelling. Despite these encouraging observations, the evidence remains largely descriptive; therefore, further systematic clinical studies with well-defined outcome measures are necessary to substantiate its therapeutic efficacy.

ACKNOWLEDGEMENT

The authors express their sincere gratitude to the Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Pimpri, Pune, for providing the necessary support and facilities for this study. The authors also acknowledge all patients who consented to participate and allowed the use of their clinical data for academic purposes.

REFERENCE

1. Sushrutsamhita with Nibandha Sangraha commentary of Dalhanacharya and Nyaychandrika Panjika of Gayadasa Acharya edited by Vaidya Yadavji Trikamji Acharya, Chaukhamba Orientalia, Varanasi Reprint (2018) Delhi Chikitsasthan 38: 114-117PN548.

2. Sushrutsamhita with Nibandha Sangraha commentary of Dalhanacharya and Nyaychandrika Panjika of Gayadasa Acharya edited by Vaidya Yadavji Trikamji Acharya, Chaukhamba Orientalia , Varanasi Reprint (2018) Delhi Chikitsasthan, 38: 114-117PN548.
3. Sushrutsamhita with Nibandha Sangraha commentary of Dalhanacharya and Nyaychandrika Panjika of Gayadasa Acharya edited by Vaidya Yadavji Trikamji Acharya, Chaukhamba Orientalia , Varanasi Reprint (2018) Delhi Chikitsasthan, 38: 114-117PN548.
4. Kirti K, Panigrahy LS, Dixit R, Tiwari V. A conceptual study of Jalaukavacharana. *World Journal of Pharmaceutical and Medical Research*, 2022; 8(5): 123–125.
5. Tripathy Brahmananda, Astanga Hridayam with Nirmala Hindi commentary, Chaukhamba Sanskrit Pratishthan; Delhi; Reprint 2017. Uttara Sthan. 22/108.P.1049
6. Sashtri AmbikaDutta, Sushruta Samhita with Ayurveda Tattva Sandipika, Hindi commentary, Chaukhambha Sanskrit Sansthan; Varanasi; 2010, Chikitsa Sthana 22/16-21: 123.
7. Sashtri AmbikaDutta, Sushruta Samhita with Ayurveda Tattva Sandipika, Hindi commentary, Chaukhambha Sanskrit Sansthan; Varanasi; 2010, Chikitsa Sthana 22/35-39: 124.
8. Thakral K.K, Sushruta Samhita Hindi commentary published by Chaukhambha Sanskrit Sansthan; Varanasi; Reprint 2010, Uttara Tantra.8/4, 5, 8.P.43, 44.)
9. Thakral K.K, Sushruta Samhita Hindi commentary published by Chaukhambha Sanskrit Sansthan; Varanasi; Reprint 2010, Uttara Tantra, 26/30-37. Nibandha Sangraha tikka. 182.
10. Whitaker IS, Rao J, Izadi D, Butler PE. Historical Article: Hirudo medicinalis: ancient origins of, and trends in the use of medicinal leeches throughout history. *Br J Oral Maxillofac Surg*, 2004 Apr; 42(2): 133-7. doi: 10.1016/S0266-4356(03)00242-0. PMID: 15013545.