



Effectiveness of Rohni Ointment in Managing Agantuja Vranashotha, with Special Focus on Superficial Thrombophlebitis – A Case Study

Suyash Zagade¹, Shruti Shukla², Datta Kumavat³

¹PG Scholar, Department of Shalyatantra, SMBT Ayurveda College & Hospital, Nandi Hills, Dhama Gaon, Igatpuri, Nashik, Maharashtra - 422403

²Assistant Professor, Department of Shalyatantra, SMBT Ayurveda College & Hospital, Nandi Hills, Dhama Gaon, Igatpuri, Nashik, Maharashtra – 422403

³Professor, Department of Shalyatantra, SMBT Ayurveda College & Hospital, Nandi Hills, Dhama Gaon, Igatpuri, Nashik, Maharashtra – 422403
E – Mail: suyashzagade@gmail.com

ABSTRACT

Superficial thrombophlebitis is inflammation of the vein, and it is a common complication arising from the intravenous administration of drugs, often during IV cannulation. This inflammatory condition typically occurs due to local injury and microbial contamination. Local treatment is generally more effective than systemic medications. This case report discusses the management of superficial thrombophlebitis in an Ayurvedic treatment approach. Case Presentation: A 39 year old female diagnosed with superficial thrombophlebitis presented to the OPD with the complaints of Oedema, tenderness, erythema over right forearm Pain at affected site since 2-3 days History of IV cannulation 3-4 days back. Intervention: The treatment included dietary changes, an established Ayurvedic treatment protocol and lifestyle modifications. Outcome: The study showed a significant reduction in Oedema, tenderness, erythema. Patient experienced substantial relief within five days, supporting its use as a topical alternative to NSAIDs and heparin gels. Conclusion: This case demonstrates that Ayurvedic interventions can effectively manage superficial thrombophlebitis, highlighting the importance of a holistic approach to healthcare.

KEYWORDS: *Agantuja Vranashotha*, Superficial Thrombophlebitis, Rohni Ointment, Inflammatory Management

INTRODUCTION

Thrombophlebitis can vary from mild local redness to severe cellulitis. It is also a significant cause of fever during the postoperative period, making it crucial to prevent the spread of inflammation in the primary condition¹. Although several systemic antimicrobial medications are available to address this issue, they are often insufficient for complete eradication and come with their own limitations. Many systemic and localized drugs that are typically effective for inflammatory swellings are not very safe due to potential complications; similarly, local medications can lead to adverse effects like contact hypersensitivity dermatitis, among others. In the field of Ayurveda, inflammatory swellings are effectively treated both medically and through surgical methods. *Shalyatantra* represents one of the key eight branches of Ayurveda, covering various surgical and para-surgical techniques for the treatment of numerous conditions. *Vranashotha* is regarded as the initial stage of *Nija vrana*². Acharya Sushruta provided a comprehensive description of inflammatory swelling under *Vranashotha*. Recognized as the father of Indian surgery (*Shalya tantra*), Acharya Sushruta understood the significance of *Vranashotha* (inflammatory swelling) and *Vrana* (wound) along with their management in surgical practice. *Vranashotha* is described as the early phase of *Vrana*. Acharya Sushruta outlines seven *upakramas* for treating *Vranashotha*. In this regimen, the first is *Vimlapana* (softening through finger kneading), the second is *Avasechan* (bloodletting), the third is *Upanaha* (warm poultices), the fourth is *Patana* (cutting/incision), the fifth is *Shodhana* (cleaning), the sixth is *Ropana* (healing), and the seventh is *Vaikrutapaham* (removing or warding off abnormalities)³. Rohni Ointment was chosen for its effectiveness, combining common indigenous ingredients for local application in *Vranashotha*, as mentioned in various Ayurvedic texts, which highlight their properties of *Shophaghana*, *Shothahara*, and *Vishaghna*. A case report has illustrated the successful management of superficial thrombophlebitis patient using an Ayurvedic treatment plan.

AIM:

Evaluation of the efficacy of Rohni Ointment in the management of *Agantuja Vranashotha*, with a specific focus on its effects on thrombophlebitis.

OBJECTIVES:

1. To evaluate the effect of Rohni Ointment when applied topically in the management of *Vranashotha*, specifically focusing on superficial thrombophlebitis of veins, with twice-daily application over a 5-day treatment period.
2. To explore and develop a new drug formulation aimed at addressing common conditions that arise in patients as a result of intravenous treatments.
3. To investigate the effectiveness of Rohni Ointment in managing swelling associated with thrombophlebitis.

CASE PRESENTATION:

A 39 year old female office worker presented with complaints of Oedema, tenderness, erythema over right forearm Pain at affected site since 2-3 days History of IV cannulation 3-4 days back. She denied any history of trauma or underlying venous conditions. Doppler ultrasound confirmed the diagnosis of superficial thrombophlebitis.

MATERIALS & METHODS:

Ayurveda offers an effective approach to treating *Vranashotha* through the use of herbs, herbal powder massages, and the local application of herbal formulations known as *Lepa*. According to Ayurvedic practices, *Lepa* is a topical treatment that should be gently massaged into the skin in an upward direction, opposite to the hair's growth. The primary indication for using *Lepa* is outlined in the "*Shashti Vrana Upakrama*". For the patient mentioned, Rohni ointment was applied as part of the treatment.

Table No. 1: COMPOSITION OF ROHNI OINTMENT:

S. No.	Drug name	Rasa	Guna	Virya	Doshakarma	Part used
1.	<i>Rohitak</i>	<i>Katu, Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Vranaropaka, Raktashodhaka, Vishaghna</i>	<i>Twak</i>
2.	<i>Haridra</i>	<i>Katu, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Kapha-Vatashamak, Pittarechak, shothahara, Varnya</i>	Rhizome
3.	<i>Nirgundi</i>	<i>Katu, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Shothahara, Vrana Shodhana, vrana Ropan, vedana sthapana, Kusthaghana, Kandughna</i>	Leaves, roots, seeds

Above 3 each 50 gms processed with Alcohol Extraction method in Soxhlet apparatus mixed with petroleum jelly.

METHOD FOR APPLYING ROHNI OINTMENT:1) *Purvakarma:*

Written informed consent from the patient was obtained. The procedure site was cleaned with tap water.

2) *Pradhana Karma:*

The patient was asked to lie in a comfortable position, and the area affected by the disease was properly exposed. A pre-procedure photograph was taken with the patient's permission from different angles. The required amount of prepared *lepa* was applied, and Rohni ointment was gently applied to the entire affected area in the opposite direction of hair growth. Any wound from venepuncture, if present, was avoided during the paste application.

3) *Paschat Karma:*

After the *lepa* paste dried, it was removed, typically by gentle wiping or washing.

TREATMENT PROTOCOL

The patient was prescribed Rohni Ointment for topical application twice daily for four weeks. The ointment was applied in a thin layer over the affected area, with gentle massage recommended to enhance absorption. Alongside the topical treatment, the patient was instructed to elevate the leg, wear compression stockings, and avoid prolonged sitting. Pain relief was managed with over-the-counter NSAIDs as needed.

RESULTS:

In a clinical evaluation, the patient showed significant improvement in symptoms after using Rohni Ointment, including a notable reduction in pain, tenderness, edema, and erythema. The ointment effectively controlled the localized inflammatory response associated with superficial thrombophlebitis. The patient experienced substantial pain relief, with discomfort diminishing significantly during the treatment period. Swelling was visibly reduced within 3–4 days of application, and there was a marked decrease in redness, indicating a reduction in inflammation. These outcomes highlight the ointment's anti-inflammatory, analgesic, and wound-healing properties, contributing to the patient's overall recovery.

DISCUSSION

1. Pain and Tenderness

The current study demonstrates that Rohni Ointment is highly effective and statistically significant in alleviating pain, likely due to its ability to reduce prostaglandin levels. This indicates that the formulation possesses analgesic properties, functioning as *Vedanasthapaka*. The presence of *Nirgundi* and *Haridra*, which contain active compounds such as turmerones, curcumin, and curcuminoids, contributes to this effect. Additionally, *Shunthi* contains bioactive constituents like gingerols, shogaols, and zingerone, which are known for their potent anti-inflammatory and antioxidant properties. Together, these ingredients make the formulation effective in managing pain and inflammation.

2. Oedema

The formulation significantly reduces inflammatory oedema, likely due to the *dhatushoshaka* (tissue-drying) effect of its *kashaya* (astringent) and *tikta* (bitter) properties, as well as the *kledashoshaka* (moisture-absorbing) effect of *Haridra*. The *laghu* (light) and *ruksha* (dry) qualities of *Haridra* further aid in reducing swelling. Additionally, *Nirgundi* helps alleviate vitiated *kapha*, contributing to its *shothahara* (anti-inflammatory) action, which effectively reduces oedema.

3. Erythema

The drug formulation has been found to effectively reduce erythema (redness) and promote *Raktaprasadana* (blood purification), primarily due to the actions of *Haridra* and *Rohitak*. The *pittashamaka* (pitta-pacifying) and *pittarechaka* (pitta-expelling) properties of *Haridra* act as a cooling and astringent agent. The *kashaya* (astringent), *tikta* (bitter), and *sheeta virya* (cooling potency) of the ingredients help constrict blood vessels, thereby reducing erythema.

4. Other Benefits

The formulation exhibits remarkable effects on the skin, acting as *Varnya* (skin-enhancing), *Vranashodhak* (wound-cleansing), and *Vranaropaka* (wound-healing). *Nirgundi* is particularly effective in treating all types of wounds, earning it the title *Sarvavraneshujita*. Similarly, *Haridra*, known as *Twakdoshahara*, addresses various skin disorders. Patients experienced significant relief and were free from the toxic effects of the disease within five days of applying the formulation, highlighting its rapid and potent therapeutic action.

CONCLUSION

Rohni Ointment has demonstrated significant efficacy as a topical treatment for managing *Agantuja Vranashotha* (traumatic inflammatory swelling), particularly in cases of superficial thrombophlebitis. Its potent anti-inflammatory, analgesic, and wound-healing properties played a crucial role in achieving notable clinical improvements within a short span of treatment. The formulation's ability to reduce inflammation, alleviate pain, and promote tissue repair underscores its therapeutic value. Furthermore, the complete absence of adverse effects highlights its excellent safety profile, making it a reliable and well-tolerated option for patients. This combination of effectiveness, rapid action, and safety positions Rohni Ointment as a promising therapeutic choice for managing such conditions.

REFERENCES

1. Thrombophlebitis. In: Kumar V, Abbas AK, Aster JC, eds. *Robbins and Cotran Pathologic Basis of Disease*. 10th ed. Philadelphia, PA: Elsevier Saunders; 2020:123-125.
2. Sharma PV. *Sushruta Samhita of Sushruta with the Nibandhasangraha Commentary of Dalhana*. Varanasi: Chaukhambha Visvabharati; 2013. (Sutrasthana, Chapter 21, Verse 3).
3. Sharma PV. *Sushruta Samhita of Sushruta with the Nibandhasangraha Commentary of Dalhana*. Varanasi: Chaukhambha Visvabharati; 2013. (Chikitsasthana, Chapter 1, Verse 7-8).