



# A CASE STUDY ON ROLE OF JALAUKAVACHARAN FOR KANDU AND DAHA IN VRANAGRANTHI (KELOID).

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**Abstract:** In Ayurveda, Vranagranthi resembles keloid. The pathogenesis includes vitiation of Rakta, Meda, and Mamsa Dhatus, primarily due to aggravated Vata and Kapha doshas. keloids are benign dermal growths resulting from abnormal wound healing, marked by the excessive proliferation of fibroblasts and deposition of immature collagen fibers presenting with symptoms such as kandu (itching), Daha (burning sensation), pain, tenderness, and cosmetic disfigurement. The treatment of keloids is difficult and often unsatisfactory. Several treatment modalities have been tried, but most of them have rendered disappointing results, especially when recurrence is concerned. Commonly used treatments include intra lesional steroid injection, which can have local side effects like skin relaxation, skin atrophy, skin erosion, skin pigmentation along with the recurrence. Purpose of the study: the key objective of the study is to effectively manage symptoms of vranagranthi and reduce kandu and daha in patients. **Observation and conclusion:** After 28 days patient saw a considerable reduction in kandu and daha over keloid.

**Key Words** - Keloid, Vranagranthi, Jalaukavacharan, Raktamokshana, Ayurveda, Leech Therapy, Kandu, Daha

## 1.INTRODUCTION

According to Vagbhata, when the body's impurities (doshas), mainly kapha, disturbed the fat (medas), muscle (mamsa), and blood (rakta) tissues, they form Vrana Granthi, is when a wound does not heal properly. Other body tissues like medas and mamsa also gets involved. This condition is very similar to keloids, which are thick, raised scars that develop after skin injuries like burns or surgeries. Keloids forms due to too much collagen and blood supply in the area. They appear as dark, painful, itchy scars and could spread beyond the original injury. In India, keloids affected about 22.86% of people.

Modern treatments such as steroid injections, laser therapy, 5-fluorouracil, and surgery often gave unsatisfactory results and had side effects like skin thinning, erosion, or recurrence of the scar. In Ayurveda, bloodletting (Raktamokshana) was believed to prevent and cure skin disorders, swellings, and blood-related issues. Leech saliva contained helpful substances like: Calin, which stopped platelets from forming clots, Fibrinase and collagenase, which broke down thick scar tissue, and Hirudin, which prevented blood clotting. there was a need to explore alternative methods. Leech therapy was chosen as it targeted the root cause—removing excess doshas—and supported natural healing of the scar.

## 2. CASE REPORT

Present case report reveals a male /52 years of age, who had vranagranthi present over chest region over sternal region since 10 years gradually increasing in size .patient has no any comorbidities Patient has itching and pain over the keloid site. Patient has not taken any kind of treatment before this and has aggravation of symptoms since one week so visited shalya tantra opd at PHRC hospital.

Past History - He had no history of any major illness previously and no relevant family history.

Personal History :- Addiction-none, occupation laboratory technician, appetite- normal, sleep disturbed (due to pain), bowel- regular, micturition normal, allergy-none.

Examination of keloid - size ~ 5.4 \* 2 \*0.5 cm

-color -reddish

-Tenderness - present

Lab investigations - BT 2 min 00 sec

-CT 3 min 10 sec

-CBC 13.5 /5600/2.71

Intervention – Jalaukavacaran on day 0 ,7<sup>th</sup>,14<sup>th</sup>,21<sup>st</sup> day

## 3.MATERIALS AND METHODS

### 1] Inclusion Criteria:

\* Patient of vranagranthi with daha and kandu. ,Age group 18-60years ,Patients with written consent,vranagranthi from all over the body except face, Patient indicated with jalaukavacharan ,With familial pedigree for developing vranagranthi

### 2] Exclusion Criteria:

\* vrana granthi over vital areas, Patient with uncontrolled Diabetes mellitus and hypertension, Patient with bleeding disorder, Pregnancy, Patient with long term use of systemic corticosteroid , +systemic chemotherapy or immunosuppressive drugs., Patient with allergy to leeches., Patient on anticoagulant medication.

3] Withdrawal Criteria : If patients develop any adverse effect ,If patient refuses to continue with the treatment, If patient have aggravation of symptoms.

### **Purva Karma (Preparation)**

Leeches were placed in turmeric water f/b clean water for 48 minutes until they appeared active and free from natural urges. The patient received psychological reassurance (Ashwasan Chikitsa), was assessed, written consent was taken.

### **Pradhana Karma (Main Procedure)**

The site was cleaned with NS or sterile water and rubbed with gauze. Two leeches were placed on the site using a wet cloth and covered with a moist cloth. Cool water was dripped to keep the area cool.

Leeches were removed using turmeric when itching or pain started.

### **Paschat Karma (Aftercare)**

Leeches were made to vomit in a tray by applying turmeric .They were then cleaned in fresh water. The wound was cleaned, turmeric was applied, and dressing was done.

Schedule -Therapy was done on Day 0, 7, 14, and 21<sup>st</sup> day



**4. ASSESSMENT CRITERIA**

• **SUBJECTIVE CRITERIA**

- Gradation of subjective criteria –
- Pain -Visual analogue scale [VAS] – Number will be marked which equals to patients pain. Pain score – 0 to 10 Numerical Rating Scale [NRS]

Sr no	Criteria of gradation	Grade
1	No pain	00
2	Mild pain	01-03
3	Moderate pain	04-06
4	Severe pain	07-10

**Itching**

Sr no	Criteria	Grade
1	No itching	00
2	Mild itching (occasional)does not disturb routine	01-03
3	Moderate itching (frequent itching disturbs routine activity but no sleep)	04-06
4	Severe itching (disturbs both routine and sleep )	07-10

• **OBJECTIVE CRITERIA**

**Tenderness**

1	Absent	0
2	Present	1

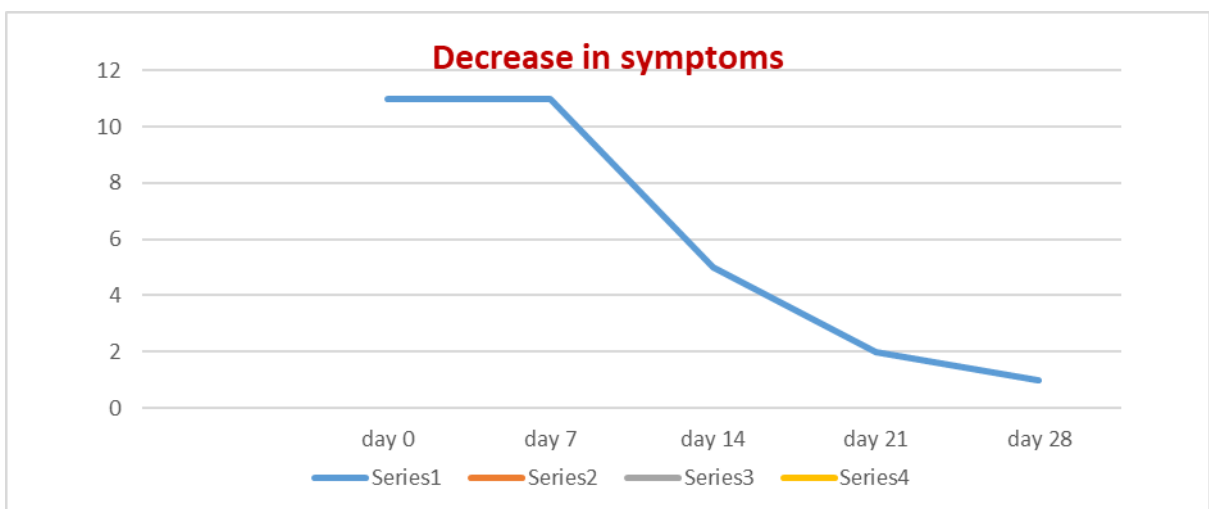
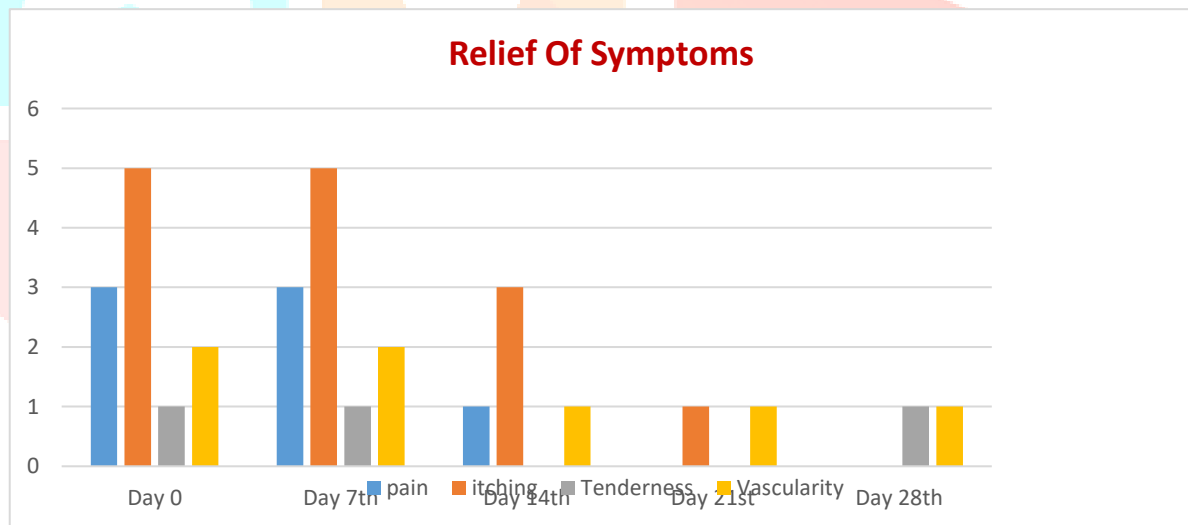
Vascularity

1	Normal color (closely resembles to skin)	00
2	Pink	01
3	Red	02
4	Purple	03

8. OBSERVATION AND RESULT:

Subjective parameter observation	Day 0	Day 7	Day 14	Day 21	Day 28
pain	3	3	1	0	0
itching	5	5	3	1	0

Objective parameter observation	Day 0	Day 7	Day 14	Day 21	Day 28
Tenderness	1	1	0	0	0
Vascularity	2	2	1	1	1



## 9. RESULT

Patient showed i.e. >80 % gradual reduction in Kandu and Daha by the 28th day. Objective improvements were noted in terms of reduced tenderness and normalization of vascularity in the affected areas. Jalaukavacharan demonstrated both symptomatic and structural improvement in keloid lesions, supporting the Ayurvedic view that localized Rakta Dushti plays a critical role in Vranagranthi.

### Conclusion:

Jalaukavacharan proved to be an effective and minimally invasive treatment modality for Vranagranthi(keloid), especially in reducing itching and burning sensation. Leech saliva, rich in anti-inflammatory, anticoagulant, and enzymatic components like hirudin and collagenase, appears to counteract the pathological mechanisms involved in keloid formation. This study validates the ancient Ayurvedic approach of bloodletting in modern clinical settings and encourages further research on its broader dermatological applications.

**Discussion-** In above case raktamokshana offers benefits, including relief from pain (shoola), disease (roga), lightness of body (laghavata), and mana prasannata. It is also believed to prevent various disorders such as twak dosha (skin diseases), granthi (nodules), shopha (swelling), and raktaja roga (blood-related conditions). Jalaukavacharana (leech therapy) is a practical and effective method of Raktamokshana in Ayurveda. Leech saliva contains several bioactive compounds—calin, fibrinase, collagenase, and hirudin—which have anticoagulant, anti-inflammatory, and tissue-regenerating properties. These help in breaking down excess collagen, reducing fibroblast activity, and improving local circulation, thus promoting natural healing of chronic wounds and abnormal scars like keloids.

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Conflict of Interest- None declared

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