

CASE REPORT: VARICOSITY AND THE EFFECT OF JALAUKAVACHARANA

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ABSTRACT

Varicose veins, a common vascular disorder, result from venous valve incompetence leading to dilatation, pain, and discomfort. In Ayurveda, it can be correlated with Sirajagata Vata. Jalaukavacharana (leech therapy), a blood-letting procedure described in Ayurveda, is indicated in such conditions due to its Shodhana (purification) and Ropana (healing) properties. This case report presents a 40-year-old male patient with varicosity of the left lower limb, treated with Jalaukavacharana. Significant relief in pain, burning sensation, and swelling was observed, suggesting that leech therapy can be an effective Ayurvedic intervention for varicosity.

Key words: Ayurveda, Varicose vein, Varicosity, Jaulaka, Jaulakavacharana

INTRODUCTION

Varicosity or varicose veins is a chronic venous disorder characterized by dilated, tortuous veins, commonly affecting the lower extremities. Prolonged standing, obesity, and genetic predisposition are among the risk factors. Conventional management includes compression therapy, sclerotherapy, and surgical interventions. However, recurrence and complications are common. In Ayurveda, varicosity can be correlated with Sirajagata Vata, where vitiated Vata affects the veins (Sira). Jalaukavacharana, one of the Raktamokshana procedures, is advocated for conditions involving vitiated Rakta and Pitta. Leech saliva contains bioactive substances like hirudin and vasodilators that help in reducing venous stasis, inflammation, and pain.

Varicose veins are enlarged, bulging veins, most often found in the legs, that occur when the one-way valves in the vein walls become weak or damaged, causing blood to pool and flow backward instead of towards the heart. The affected veins become dilated, elongated, and tortuous because of the increased pressure. While the exact microscopic changes are still debated, the macroscopic defect is the failure of the valves to close properly, leading to blood pooling.

Key Anatomical Features of Varicose Veins

- **Superficial location:**
Varicose veins occur in superficial (near-surface) veins, making them visible under the skin.
- **Dilated and tortuous:**
The veins become swollen (dilated) and twisty or winding

(tortuous).

- **Incompetent valves:**

One-way valves within the veins are responsible for preventing the backward flow of blood. In varicose veins, these valves are weak or damaged, failing to prevent blood from flowing backward.

- **Weakened vein walls:**

In addition to valve damage, the walls of the veins are also weak and lose their elasticity, making them more susceptible to distention and pressure.

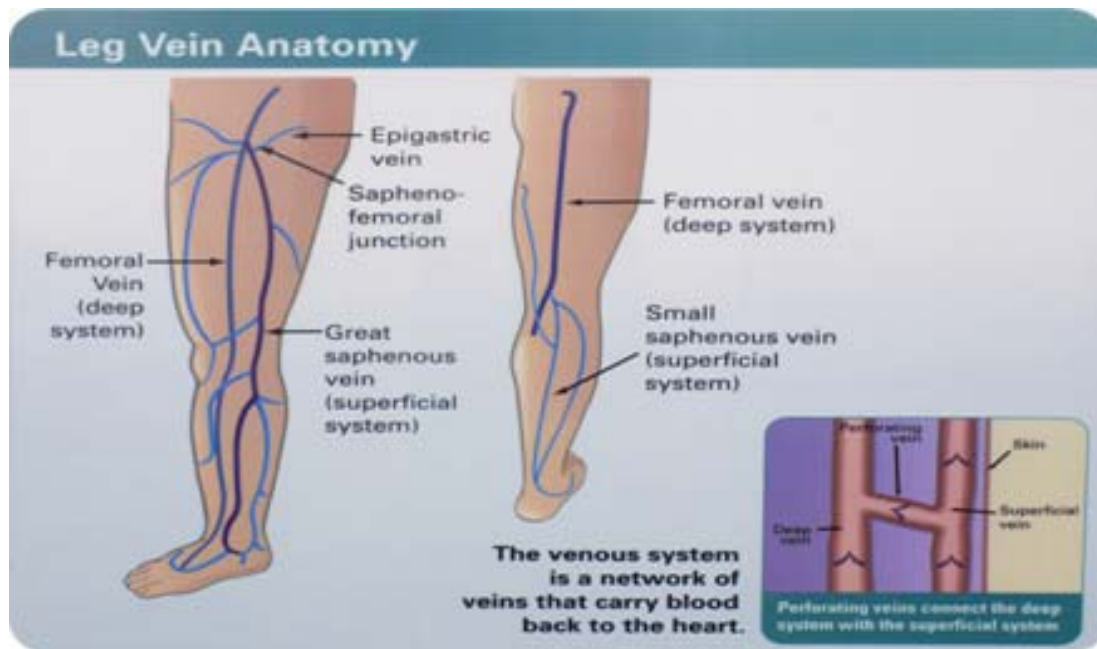
Affected Veins

- **Saphenous veins:** Varicose veins most frequently involve the main axial superficial veins of the legs, including the great saphenous vein (GSV) and the small saphenous vein (SSV).
- **Tributaries:** Other smaller superficial veins (tributaries) can also become affected.
- **Perforating veins:** In some cases, the superficial system is connected to the deeper veins by perforating veins, which can also become affected.

Why They Develop

- **Increased pressure:** Standing and walking for prolonged periods increases pressure in the veins of the lower body, contributing to the development of varicose veins.
- **Genetic factors:** A family history of venous disease is an important risk factor.
- **Other factors:** Factors that increase intra-abdominal pressure, such as obesity, pregnancy, and chronic

constipation, can also contribute.



METHODS

A 40-year-old male patient presented with complaints of dilated veins, pain, and swelling in the left lower limb for 2 years. On examination, tortuous and dilated veins were observed along with mild edema. The diagnosis of varicosity was made. The patient was selected for Jalaukavacharana therapy after obtaining informed consent.

Procedure: The affected area was cleaned with sterile normal saline. Medicinal leeches (Jalauka) were applied to the dilated veins. The leeches were allowed to suck blood until they detached naturally. The site was dressed with sterile gauze. The procedure was repeated once weekly for 4 weeks.

RESULTS

After four sittings of Jalaukavacharana, the patient reported significant reduction in pain and heaviness of the limb. The swelling and dilatation were reduced moderately. No adverse effects were noted. The therapy improved the patient's quality of life.

Jalaukavacharana (leech therapy) results in improved microcirculation, reduced inflammation, and enhanced healing, leading to benefits such as pain relief, reduced swelling, improved wound healing, and fading of skin discolorations like melasma. Studies show it's effective for conditions like osteoarthritis, chronic non-healing wounds, and cellulitis, often with fewer side effects than modern

pharmaceuticals, and promotes tissue regeneration.

Specific Results and Conditions:

- **Skin Conditions:**
- **Melasma (Vyanga):** Reduction in dark patches, lightening of color, and improvement in skin texture and complexion, with a significant reduction in the Melasma Area and Severity Index (MASI) score, according to a study published in the Journal of Ayurveda and Integrated Medical Sciences (JAIMS).
- **Wound Healing:** Accelerated healing of chronic non-healing wounds (Dushta Vrana), debriding tissue by blood sucking and oozing, and reducing inflammation, notes the International Journal of Ayurvedic Medicine.
- **Pain and Inflammation:**
- **Musculoskeletal Pain:** Significant pain reduction and improved relief consistency in conditions like osteoarthritis, potentially serving as a safe alternative to analgesics and anti-inflammatory drugs, according to this study in the National Institutes of Health.
- **Cellulitis (Vranashopha):** Relief from pain, redness, swelling, and tenderness, with enhanced effectiveness when combined with other treatments, according to a study in the World Journal of Pharmaceutical Medical Research.
- **Circulatory Issues:**

- **Varicose Veins:** Effective in the management of localized inflammatory disorders and conditions like varicose veins by improving venous circulation and reducing venous congestion.

How It Works:

- Leech saliva contains bioactive substances that have an anticoagulant effect, thinning the blood and preventing clots.
- These compounds also help to improve local blood circulation, reduce inflammation, and modulate immune responses.
- The procedure removes vitiated (toxic) blood from the body, which helps to restore the body's natural balance and promote healing.

DISCUSSION

The results of this case highlight the effectiveness of Jalaukavacharana in managing varicosity. The anticoagulant, anti-inflammatory, and analgesic properties of leech saliva contribute to symptomatic relief. Ayurveda advocates Raktamokshana for diseases caused by vitiated Rakta and Pitta, which correlates well with varicosity pathology. Previous studies have also shown benefits of leech therapy in venous disorders. However, large-scale clinical trials are required to establish its efficacy. Jalaukavacharana, or medicinal leech therapy, is an ancient Ayurvedic Raktamokshana (bloodletting) technique that uses leeches to remove vitiated blood and toxins from the body, primarily for conditions with a Pitta-predominance. . The procedure involves applying leeches to the skin to suck blood and inject their bioactive saliva, which contains anti-inflammatory, anti-coagulant, and vasodilator properties. It is indicated for various inflammatory, ischemic, and skin disorders, including diabetic ulcers, eczema, varicose veins, and thrombosed hemorrhoids.

CONCLUSION

Jalaukavacharana proved to be effective in reducing symptoms of varicosity in this case without any complications. It can be considered as a safe, minimally

invasive, and beneficial therapy for patients suffering from varicose veins, especially those seeking Ayurvedic management. alaukavacharana is used in Ayurveda to treat a range of conditions, particularly those involving vitiated Rakta (blood) and Pitta dosha. Common applications include:

- **Skin Disorders:** Acne, psoriasis, and non-healing wounds such as diabetic ulcers.
- **Vascular Conditions:** Varicose veins, thrombophlebitis, and atherosclerosis.
- **Inflammatory Conditions:** Abscesses, cellulites, and thrombosed hemorrhoids.
- **Musculoskeletal Issues:** May be used for conditions like osteoarthritis to reduce pain and inflammation.

Benefits

- **Effective:**
It is considered a safe and effective therapy for various inflammatory and ischemic diseases.
- **Non-invasive:**
It is a parasurgical procedure that does not involve cutting tools, making it less invasive than other bloodletting techniques.
- **Affordable and Simple:**
The procedure is relatively straightforward, less time-consuming, and more economical for patients.

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