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Case Study

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JALAUKAVACHARAN FOR VARICOSE VEINS- A CASE STUDY ON MANAGEMENT AND EFFICACY

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INTRODUCTION

- Varicose veins are a common medical condition that affects millions of people worldwide. These enlarged, twisted veins, usually found in the legs, can cause discomfort, pain, and aesthetic concerns.
- Varicose veins occur when the one-way valves in your veins, which help blood flow against gravity back to the heart, become weak or damaged.
- This can lead to blood pooling in the veins, causing them to bulge and become visible through the skin. Several factors can contribute to the development of varicose veins, including genetics, age, obesity, pregnancy, and prolonged periods of standing or sitting.
- While there are various conventional treatments available for

varicose veins, some alternative therapies, such as leech therapy, have gained attention for their potential benefits in managing this condition.

- Acharya Sushruta had described various types of granthi and its various treatment modalities among them *jalaukaavacharana* is one of them.
- Varicose veins can be correlated with Siragranthi described in Ayurveda.
- Vataprakopaka nidanas (Causative factors which aggravate Vata) such as heavy or excessive exercise, physical exertion, and straining can cause Siragranthi by obstructing the veins of debilitated person (Due to aggravated vata), which in turn causes Sankocha (Compression), Sampeedana (Squeezing) and Vishoshana (Drying up) and produces Granthi (Protruded nodule-like structure).
- Sushruta had given special chapter related to jalauka in which he had described the types,

More et al.

nomenclature, specific qualities of each type of *jalauka*, their method to apply and detach and how to do *vamana* of *jalauka*.

Acharya charak also described jalauka as best amongst all anushashtras. Jalauka
posseses sheet guna in nature and on the basis of sign.

AIM AND OBJECTIVE

Aim: To study the efficacy of Jalaukavacharan (Siravedhan) in Varicose Veins.

Objective: To reduced hyperpigmentation

To cure vericosity

To prevent ulceration.

MATERIAL AND METHODS

Case report: A 56-year-old male patient visited the OPD ofshalyatantra GACH Nanded.

Chief complaints: He was presented with complaints of blackish discoloration of anterolateral aspect of right lower leg since 5 yrs. He also had a complaints of swelling on right lower leg since 1 yr and had prominent, dilated, tortuous veins at the postero-lateral aspect of the calf region of right lower leg since 5 years. Ulceration was present on right lower leg since one week.

Past history

- ➤ K/C/O Hypertension on tab Hygotel CL bd, tab Benetowa bd
- ➤ N/H/O DM, TSH, BA
- ➤ N/H/O trauma and fall
- ➤ N/H/O Covid 19 infection (Covid vaccination id done having both doses)
- ➤ N/H/O Drug Allergy.

Personal history

Bowel: Complete Evacuation (1/day)

■ Diet: Mixed

Appetite: Regular

Micturation: Normal (2-3/day)

Sleep: Regular

• Addiction: Tobacco chewing since 15 yrs.

Personal history of the patient reveals that by profession he is a farmer where he has tostand 8–10 h daily. No relevant medical history found.

Examination of patient

Both physical and systematic examination was done. As patient had all general features of varicose veins, special tests are done to elucidate any severe illness like deep vein thrombosis.

General examination

Ashtavidha Pariksha (8-fold examination) is described in Table 1.

Nadi	Pitta vataj
Mala	Samyaka mala pravriti
Mutra	Prakrut
Jiva	Sama
Shabda	Spashta
Sparsh	Khara,Samshitoshna
Druk	Prakrut
Akruti	Sthool

On examination

GC- Moderate afebrileBP- 140/80mmhg

RS-AEBE CLEAR

PR -82/min

CVS –S1S2 NORMAL

CNS - CONSCIOUS ORIENTED

All routine investigation are normal

Local examination

Blackish discoloration over 2/3th part of right lower leg and foot (Hyperpigmentation)

Ulceration

Oedema (Pitting) present

Brodie-Trendlenburg test positive

DISCUSSION

Shushruta and Acharya Vagbhata had assigned considerable significance to Jalaukavacharana, given the separate chapters of "Jalaukavacharniya" and "Jalaukavidhi". Jalaukavacharan removes blood from the circulation, but also injects biologically active drugs that help to treat various diseases. When leech sucks peripheral blood, it induces

negative pressure in the vein present locally and promotes drainage.

Hirudotherapy

The emission of the therapeutic leech salivary gland contains more than one hundred bioactive materials which are responsible for performing the desired medical effect Leech saliva contains substances that anesthetize the wound area, making the leech bite painless to the host and dilate the blood vessels to increase the flow of blood to the bite site. Salivary gland secretions also include anti-inflammatory, bacteriostatic and analgesic effects.

Mode of action of Jalauka

- The mode of action of Jalauka is purification of the blood by eliminating deeply seated toxins and pacifying the vitiated dosha.
- * Varicose veins occur due to vitiation of Vata and Pitta dosha, which results in vitiation of Rakta dhatu and Sthansamshruva in Rakavaha Srotas, which triggers signs and symptoms of Siragranthi."
- * The secretion of salivary glands of medicinal leech includes more than one hundred bioactive substances which are responsible for performing the desired medical effect.
- * Essential constituents found in leech saliva are Hirudin, Hyaluronidase, Destabilase, Eglins, Calin, Triptase inhibitor, Hirustatin. Leech saliva contains compounds that anesthetize the wound area, make the leech bite painless to the host and dilate the blood vessels in increase the blood supply to the bite site. Hirudin is a potent anticoagulant that prevents blood coagulation by blocking the conversion of fibrinogen to flibrin.

Internal medication given to the patient

Dravya	Dose	Duration	Anupan
Panchatikta ghrit gugglu	2 Tablets	BD	Lukewarm water
Kanchanar gugglu	2 tablets	BD	Lukewarm water
Arogyavardhini Vati	2 tablets	BD	Luke warm water

RESULT AND ASSESMENT

Day 1



1st Setting of jalaukavacharan

Day -15st





During treatment

After treatment

After 15 days of treatment ulceration is cure, tortuesity and hyperpigmentation is reduced to 50%.

Day -30th



During treatment



After treatment

Day 45th



HyperpigmentationCured-70%

Scoring pattern based on severity

Assessment parameter	Grading			
Skin Changes	0	Absent	No discoloration	
	1	Mild	Blackish patchy hyperpigmentation	
	2	Moderate	Hyperpigmentation with eczema	
Tortuosity	0	Absent	No dilated veins	
	1	Mild	Few veins dilated after exertion	
	2 Moderate Multiple veins confined to ca		Multiple veins confined to calf	
	3	Sever	Severe extensive involving both calf and thigh	
Oedema (Swelling)	0	Absent		
	1	present		

RESULT

Subjective criteria	Before treatment	After treatment
Skin changes	1-Blakish patchy hyperpigmentation	1 Mild
Tortuosity	1-multiple veins dialated afterexertion	1 Mild
Oedema	1-Present	0

Role of jaluakavacharn on tortuosity, Ulceration and Hyperpigmentation

- Jalaukavacharan is believed to potentially reduce the tortuosity of varicose veins by promoting improved blood flow through its anticoagulant properties and local stimulation, which may alleviate swelling and inflammation in the affected veins.
 During 1st 15 days of treatmenttortuosity is reduced.
- Jalaukavacharan, help reduce ulceration associated with varicose veins by several
 mechanisms. During the therapy, leeches attach to the affected area and improve Blood
 Circulation. Leeches secrete natural anticoagulants and vasodilators, which can promote
 blood flow, potentially reducing stagnation in the veins and aiding in woundhealing.
- Remove Stagnant Blood: By drawing blood and lymphatic fluid away from the ulcerated area, leech therapy may reduce tissue congestion and inflammation.
- Deliver Bioactive Compounds: Leech saliva contains bioactive substances that may have anti-inflammatory and antibacterial properties, which can contribute to the healing of ulcerated skin. After 15 days of treatmentulceration is cured.
- Jalaukavacharan reduce hyperpigmentation of the skin associated with varicose veins. It is primarily employed forits potential benefits in improving blood circulation and reducing symptoms like pain and swelling in varicose veins, rather than addressing hyperpigmentation. Hyperpigmentation in varicose veins is often a result of chronic venous insufficiency and the accumulation of hemosiderin, a pigment derived from hemoglobin breakdown.

CONCLUSION

As per Ayurveda, varicose veins can be correlated with Siragranthi. According to Acharya Sushruta Raktamokshana is stated as Ardhachikitsa. Raktamokshan is beneficial for Pittajavyadhi, Pittanubandhi Vatavyadhi, and Raktadushtijanya vyadhi. As there is Dushti of Raktadhatu and Vata Prakopa in Siragranthi, Jalaukavacharan along with Raktashodhak (Removes toxins from blood), Raktaprasadana (Improves quality of blood) and Vatanulomak Aushadhas (Promotes regular movement of Vata) were given as internal medicine. Together Jalaukavacharan (Siravyadhyam), and internal medicines show significant relief in ulceration, tortousity, swelling, and skin discoloration. From this, it can be concluded that Raktamokshana, and Raktaprasadana are highly effective in varicose veins (Siragranthi).