

An Ayurvedic Management of Sirakautilya W.S.R. to Varicose Vein Ulcer - A Case Study

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Abstract: Venous leg ulcer is the wound occur due to chronic venous insufficiency. It is due to improper function of venous valves of the leg. Around 70 to 90% of chronic leg ulcer is of venous origin. If this ulcer left untreated or not properly treated, they can lead to cellulitis, gangrene and enlarged veins on your legs (varicose veins)¹. A venous leg ulcer can be susceptible to microbial infections. Symptoms of an infected leg ulcer were worsening pain, discharge coming from the ulcer, redness and swelling. A male patient came to R. A. Podar hospital was given bahya and abhyantar medication which showed significant results and showed fast recovery.

Keywords: Varicose Vein Ulcer, Lepa, Sirakautilya, Vranaprakshalan

1.Introduction

Varicosity is the penalty for vertically against gravity. The blood has to flow from the lower limbs into the heart against gravity because of the upright posture of human beings. Dilated, tortuous & elongated superficial veins of the limb are called varicose veins; they are seen in 10% of general population. The blood proteins are leaked into the extra vascular space due weak veins. The extra cellular matrix molecule and growth factor were isolated and prevented from reaching wound site, thus delays the wound healing process.³

Sometimes the veins of blood in many people appear to be more prominent. In Ayurveda this disease is called by different names e.g. siraj granthi, siragatakupitavata, Sira kautilya⁴. In this disease, veins are look like a snake shaped. According to Ayurveda, its due to blockage of channels by dushti of dhatuvaha srotas.⁵ Who's take excessive acidic & alkaline food and longtime standing posture is the main causes of varicose veins. Sira kautilya is a disease caused by sira gata vata. When vitiated vata affects sira (veins) causes two main pathology akunchana (kautilya) and purana (engorgement) of veins. Sira kautilya is described by many ayurvedic acharyas under the vatavyadhi adhaya.⁶ Sira is also the synonym of srotas. Srotas^{7,8} or channels are the path or empty spaces which allow to free flow or transportation of various types of materials through them.

2.Material and Methods

Male patient of age 52 yrs.complains of pain in the left lower leg for 12 years. The pain was gradual in onset and progressive in nature. The patient also presents with an ulcer in the left leg for 9 years which occurred spontaneously after laser therapy. It was gradual in onset and progressive in nature. At first it was small in size and gradually increased in size as time progressed. There is no history of trauma. There was pain around the ulcer. The discharge was seropurulent in nature, scanty in amount, and non-foul-smelling. He consulted a local physician, and took treatment, and regular dressing was done for the same, but he didn't get satisfactory result with these complaints he came to our

hospital, on examination wound on lateral aspect of left leg with serous discharge.

Personal history-He is a non-smoker, non-alcoholic and not having any other kind of addiction. The patient is a Hotel Management worker. His occupation requires him to stand for prolonged periods of time. He was living in very extreme weather condition. (Summer and winter)

Past History-There is no history of similar illnesses in the past. There is no history of hypertension, diabetes or any other serious illnesses in the past. There is history of previous laser therapy, pulmonary thrombo endarterectomy under TCA.

Family History- Grandmother having history of varicose veins.

Medication History- He also took medication Tab. Warfarin 4mg/5mg alternate day. Since 7 yrs.

Allergic History- Patient is allergic to sulfa drugs, contactant (cement).

H/O-Varicose vein (laser therapy taken in 2013)

Pulmonary embolism developed at 2018 (patient taking tab. Warfarin)

Recurrent pulmonary embolism (2018) Severe pulmonary hypertension 2019

Investigation

Doppler 27/6/2013 Superficial femoral vein and popliteal vein shows thickened wall with partial chronic thrombosis. Rt. lower limb incompetent sephanopopliteal. No evidence of DVT.

DOPPLER 1/10/13 Incompetent sephano femoral junction, moderate dilation of GSV, SSV.

Radiofrequency ablation done.

- 2015 Deep vein of both legs shows residual change of previous thrombus. There is however flow noted in all vein. The flow is comparative better in Lt. Leg vein.
- 2014 CT Thorax B/L pulmonary thromboembolism predominantly involving Lt. upper lobe and Rt. Upper /lower segmental brain.
- D-Dimer 1.46(0-0.5)
- Jan 2020 Chronic thromboembolic pulmonary hypertension. B/L LL DVT underwent pulmonary thromboembolctomy
- 2021 lung perfusion scan report.
- No evidence of pulmonary embolism in B/L lung in study.

General examination

General condition	Moderate
Blood pressure	130/80mmhg
Pulse rate	72/min
Respiratory rate	20/min
Temperature	96 F
Built	Medium built
Lymph node	Absent
Pallor	Present
Icterus	Absent
Clubbing	Absent
Cyanosis	Absent

Astavidha pariksha

Nadi	80/min
Mutra	Burning micturition
Mala	Malbadhta
Jivha	Saam
Shabda	Prakruta
Sparsha	Ushna Sparsha
Druk	Prakrita
Akriti	Madhyama

Systemic examination

Respiratory system	Air entry bilateral equal clear
Cardio Vascular system	S1 S2 normal No added sounds
Central Nervous System	Conscious, co-operative, oriented

Local Examination

- Single large ulcer present on dorsum of left lower foot at medial malleolus. Irregular shaped, and surrounding with small ulcer.
- Margin- inflamed and oedematous
- Edge-Sloping and punched out
- Skin around Ulcer is hyper pigmented.
- Burning, itching, temperature, discharge, sensation-present

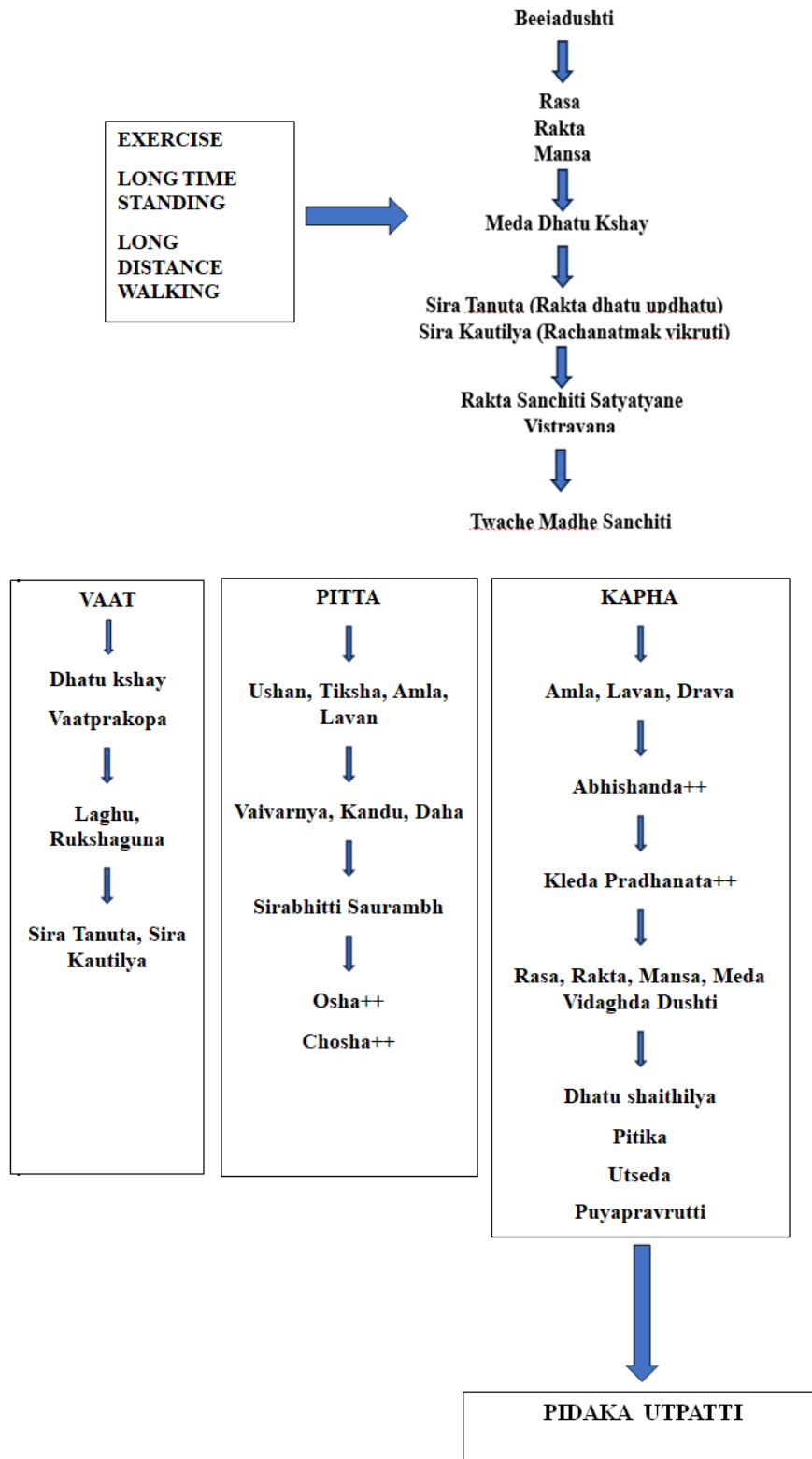
HETU

<ul style="list-style-type: none"> • Hereditary (Beej dosha) • Long distance walking • Prolong Period standing • Excess heavy weight lifting (gym exercise) • Chardi veg udiran • Continue contact with Air conditioner 	<ul style="list-style-type: none"> • Milk + Egg • Chapati+Tea • Curd, Salad , grilled food • Flavoured milk • Corn, Vinegar, dry fruits • Pack food (preservative) • Drinking water empty stomach • Yogurt, frozen food
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Strotas Dushti

<i>Annavaaha strotas</i>	<i>अतिमात्रस्यचाकालेचाहितस्यचभोजनात्।</i>
<i>Rasvaha strotas</i>	<i>गुरुशीतमतिस्निग्धमतिमात्रं</i>
<i>Raktvaha strotas</i>	<i>विदाहीन्यन्नपानानिस्निग्धोष्णानिद्रवाणिच..... भजतांचातपानलौ</i>
<i>Mansvaha strotas</i>	<i>अभिष्यन्दीनिभोज्यानिस्थूलानिचगुरुणिच</i>
<i>Medavaha strotas</i>	<i>दिवास्वप्न</i>
<i>Swedavaha strotas</i>	<i>व्यायामादतिसंक्षोभाद.</i>

3. Discussion





Criteria of Assessment

Grade	Discharge	Pain	Burning sensation	Itching	Foul smell
0	No discharge	No pain	No burning sensation	No itching	No odour
1	Scanty discharge present	Mild pain on touch	Mild burning sensation	Mild itching	Mild odour after opening dressing
2	Moderate discharge present	Mild pain without touch	Moderate burning sensation	Moderate itching	Moderate odour even before opening dressing
3	Heavy discharge present	Continuous severe pain day and night	Severe continuous burning, disturbing sleep	Severe continuous Itching disturbing sleep	Strong unpleasant odour with or without opening dressing

Treatment

date	Medicine	Dose
5/12/22	Panchwalkaladi kwath Dhawan	Twice a day
5/12/22	Trifala+musta+lodra+khadir churn	2gm with koshnajal after meal twice a day
5/12/22p	Panchawalkal+panchtikta+trifala+arjun+punnarnava+varun kwath	20ml after meal twice a day
5/12/22	Shilajatwadi vati	2 tab twice a day
8/12/22	Musta+trifala+yashtimadhu lep	For 30 min twice a day
8/12/22	Nimba+vasa+bilwa kalka lep	overnight
20/12/22	Protein supplement, vit c	1 tsp once a day 1 tab twice a day
31/12/22	Sukshma trifala	2 tab twice a day after meal
31/12/22	Gandhak rasayana	2 tab twice a day after meal
15/1/23	Madhumalini vasant	1 tab twice a day

Mode of Action

1	PANCHAVALKALA KWATH DHAWAN^{9,10}	At the site of wound Dhavan karma was done with Panchtikta, Panchwalkal, Triphala kashaya daily for 15 to 20 min twice a day. After Dhavan wound was dried and then kalka was applied daily consisting of Nimba, Vasa, Bilva for duration of overnight. Panchavalkala is a drug with Kashaya Rasa and by the action of the Rasa; it acts as a Stambhaka. It also act as Twak Prasadaka Use to reduced the Srava, Rakta Shodhaka, Pitta shamana, Varnya and Vrana Ropana antioxidants protect the tissue from the oxidative damage. Tannins, phytosterols and flavonoids are anti-inflammatory, Vitamin A and K are essential for epithelialization promoting the healing. Lekhana, Kledahara. Chedana and Raktashodhaka properties of Kashaya Rasa also will facilitate the debridement of the slough.
2	NIMBADI KALK^{11,12}	The ingredients present in Nimbadi Kalka are having Tikta and Kashaya rasa, reduces inflammation and excessive exudation as it acts as Pidana and Kledaghna. Krimigna, Kandugna property of the Nimbadi Kalka acts as anti-microbial.Yogavahi Guna, Lekhana and Chedhana Guna, Ushna Virya, Laghu Guna helps to penetrate into the deep tissue and debride the wound.
3	YASTIMADHU, MUSTA, LODHRA LEP	TiktaKashay rasatmak, Twak prasadan Raktaprasadan, Kledashoshan, Dahashaman
4	PANCHWALKAL KWATH¹³	It is a powerful anti-septic which also has anti-inflammatory properties. It is also an efficient anti-microbial, anti-bacterial and anti-fungal. Panchavalkala Kwatha Churna is the dried powder form of 5 different herbs Vata, Udumbara, Ashwatha, Parisha and Plaksha. It is effective in reducing Kapha. This formulation has specific actions on the Meda Dhatu and thus effectively treats the adipose tissue
5	SHILAJATWADI VATI^{14,15}	Anti-inflammatory and anti-ulcer characteristics of Shilajit help treat ulcers. Shilajit increases the regeneration of new cells and aids wound healing. most important role of granulation tissue is the shortening of wound, forming smooth layer to epithelialization in wound. Humic acid solution improves the speed of wound healing. Shilajit can affect skin health by stimulating endothelial cell migration and growth of blood vessels Shilajit (copper, zinc, iron, proteins) Helps in collagen binding function. Laghu, Ruksha pacifies the Kapha and Vata doshas, whereas kashay, detoxifies the Pitta also have positive effect on the various Dhatus which are Rasa, Rakta, Mamsa.
6	TRIPHALADI CHURN¹⁶	Triphala-Rich in vit C (Ascorbic acid) helps in collagen formation and remodelling of connective tissue. Healthy granulation of tissue and capillary strengthening Khadir+Lodra+Musta – due to Kashaya ras helps in skin tightening by contracting skin cells. Lekhana, Jantughna, Kanduhara, Raktaprasadaka, Vranaghna, krimighna
7	GANDHAK RASAYAN¹⁷	कण्डुचकुष्ठविषदोषमुग्रं..... यो. र Gandhak is a well- known and preferably used medicine in kushta roga. It acts as a raktashodhak, heals wound and improve quality of skin. Acts as yogavahi, dahashamak, jantughna, vishaghna, pittashamak. Raktaprasadak, dushivish shaman, vranaghna, sthambak. Effects on Tridosh i.e. Vata Pitta and Kapha. It acts as anti-bacterialanti-Viral, anti-pruritic and anti-inflammatory agent.
8	SUKSHMA TRIPHALA¹⁸	It contains kajjali, acts yogavahi, sukshma, it penetrates deep down into sukshma Srotas and helps in srotoshodhana act on target organ. Triphala acts vranashodhana and vranaropana. Jantughnata (anti-microbial) these properties of Kajjali are essential to enhance efficacy & potency in prepared drug. Kledaghna, lekhaniya properties.
9	MADHUMALINI VASANT	Hingula -Acts as rejuvenator. Enhances body strength. Very useful in muscle weakness and enhances muscle growth. Yashada-Muscle hold most zinc (49.5%) It aids in protein synthesis which help in skin and muscle repair

Protein and Vitamin C

Protein Useful in proliferative phase of wound repair, collagen deposition is crucial to increase the wound’s tensile strength. Protein is vital in the synthesis of enzymes and the creation of connective tissue capillaries and epithelial cells. Amino acids provide the building blocks of antibodies, macrophages and a healthy immune System.

Amalaki is a valuable source of antioxidants and their phytochemicals and flavonoids keep artery walls healthy and free of fats to help prevent heart disease. Regular vitamin C consumption benefits the entire cardiovascular system by maintaining blood vessel integrity, reducing blood cholesterol levels, and preventing lipid peroxidation. Formation of collagen in connective tissues and acts as intercellular cement in many tissues particularly capillaries walls.

4.Observation and Results

	Before Treatment	After Treatment
Discharge	3	1
Pain	2	0
Burning Sensation	3	0
Itching	3	1
Foul Smell	0	0



Initially the wound was very deep, rough irregular and had angry look with localized continuous feeling of pain, (radiating and not relieved by rest) along with tenderness which resists to touch and rigidity and was filled with profuse continuous discharge which needs frequent dressing and unhealthy granulation tissue. Gradually, there was improvement after treating with the Ayurvedic medicines. Ultimately there was no discontinuity of the skin and mucous membrane with adhere margins; smooth regular and healthy granulation tissue, no pain, no swelling, no discharge and no tenderness.

- Healthy granulation was formed within 15 days. The wound started to heal with contracture in its size by filling the scar from edges and base.
- After a month the wound size was comparatively reduced with normal skin coloration at the healed area.
- At the end of two and half months, the wound was completely healed with minimal scar tissue formation.

5. Conclusion

Venous ulcer, a common cause of leg ulcer, known recurrence. The conventional treatment options available are not satisfactory and very expensive. The venous ulceration can be effectively managed and venous insufficiency can be prevented through Ayurveda without any adverse effect. Varicose veins are a problematic disorder of today's life which doesn't have a permanent treatment. But Ayurveda provides promising results by not only reducing discomfort of venous insufficiency but also assisting in healing of varicosity, ulcers, helps in collagen formation which in return increases tonicity of veins. Ayurveda also improve circulation of blood which is the basic cause of disease. Therefore, Ayurveda is a treatment regime which can give promising results.

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