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Case Study

A SINGLE CASE STUDY OF AYURVEDIC MANAGEMENT OF *SIRAGAT VATA* W.S.R TO RAYNAUD'S DISEASE.

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ABSTRACT

Siragata Vata is classified as an *Ekanga*⁽¹⁾ (localized) *Vatavyadhi* in Ayurvedic texts and is closely correlated with Raynaud's disease in modern medicine. This condition is characterized by vasospasm or obstruction of blood vessels, leading to reduced blood flow to extremities such as the fingers, nose, toes,etc⁽²⁾.Common symptoms include pallor or blanching of affected areas, followed by dusky cyanosis and painful red engorgement upon rewarming.For the treatment of Raynaud's illness modern medications such as vasodialators, ACE inhibitors,etc surgeries like Atherectomy,Thrombectomy,etc are recommended.However these medications and procedures have certain drawbacks so to avoid those drawbacks. Ayurvedic therapies described for *Siragata Vata* can be beneficial for the treatment of Raynaud's disease without any alteration of other organs functions.Leech therapy (*Jalaukavcharan*) has vasodilator effect which can improve the vasospasm.So in this case study, a patient having same complaints was treated with *jalaukavcharan* and few internal medications.

KEYWORDS :Raynaud's disease, *Jalaukavacharan karma*, *siragat vata*,vasodialators.

INTRODUCTION

Raynaud's phenomenon is an episodic, localized, vasospasm (vasoconstriction) of small vessels of hands and feet that leads into temperature and colour changes with sequence of clinical features called as Raynaud's Syndrome as initial pallor (blanching, vasospasm), then cyanosis (venous congestion); lastly red (congestion due to rapid blood flow). This phenomenon was first described in 1862 by Maurice Raynaud. Women are most commonly affected than men. People who reside in colder climate are more likely to experience it. Raynaud's disease can be correlated with *Siragata Vata* in Ayurveda, which is categorized under *Vatavyadhi* in the *Brihatrayee* texts. Factors that can exacerbate *Siragata Vata* include exposure to cold foods and environments (*Shita Ahara Vihar*), mental stress (*Chinta*), emotional distress (*Shoka*)⁽³⁾, and blockages in the channels of circulation (*Srota Avarodha*)⁽⁴⁾. This leads to a vitiation of *Vata* within the blood vessels (*Sira*) of the affected area. The imbalanced *Vata* manifests as symptoms similar to Raynaud's disease, including:

- ***Sira Sankocha***: vasoconstriction
- ***Sira Riktata***: emptiness of vessels
- ***Sira Adhmana***: vasodilatation
- ***Sira Poorana***: fullness of vessels⁽⁵⁾
- ***Manda Ruk***: mild pain⁽⁶⁾

These symptoms closely align with those observed in Raynaud's disease. So to avoid the vasoconstriction and further tissue anoxia use of *jalauka* was done and excellent results were obtained.

CASE REPORT :

A 33 yr old female patient got admitted in female surgical ward with

C/O - Blackish discoloration and pain over tip of left index finger ...since 3 months.

No H/O- DM/HTN/TB/BA/any other major illness

S/H – Previous 2 L.S.C.S

O/H – G₂P₂L₂A₀D₀

Addiction/H – None

Allergy/H - None

D/H – Tb.Xarelto 2.5mg 1 BD, Tb.Pletoz 50mg 1 BDSince 3 months

Investigations-CBC– WNL, BSL®- 95mg%, Sr.Creat.– 1mg%, PT-14sec, INR- 1

The patient was taking above allopathic treatment but she was not getting relief so she came to our hospital for ayurvedic treatment. Ayurveda has explained *Raktamokshan* treatment means Blood letting procedure in which impure blood from that part of body is removed⁽⁷⁾. Among the types of *Raktamokshana*, *jalaukavcharan* was selected because it is suitable for all individuals, including women, children, the elderly, and those with low pain tolerance.

METHODOLOGY:

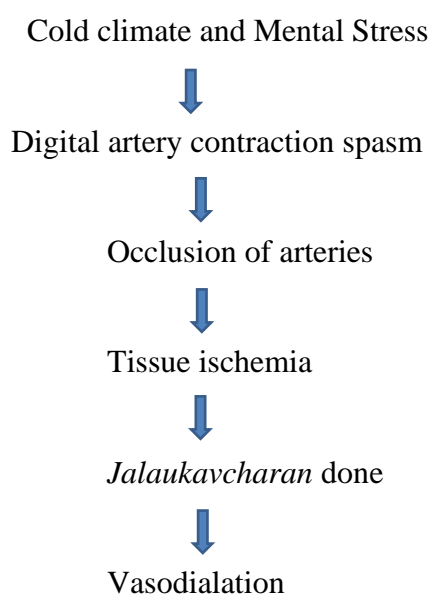
Purva karma:

Site having discoloration and pain was cleaned before applying the leeches (*jalauka*). Then leeches were treated with *haridrachoorna* for its purification and then immersed into normal water.

Pradhan karma:

After cleaning the site, *Jaluaka* was then applied slightly below the discolored part of tip of index finger. While sucking the blood following signs appears in the body of the leech a) Gradual distension in the central portion of the body: As the leech fills with blood, its body expands noticeably in the central region. b) Itching and burning sensation at the bite site: The area where the leech attaches may experience itching and a burning sensation due to the anticoagulants and enzymes in its saliva. c) Visible pulsations on the body of the leech: Pulsations may be seen on the leech's body as it actively pumps and processes the ingested blood. After applying *Jaluaka*, it was covered with wet cotton. The leech detaches itself naturally after feeding i.e after approx. 30- 45 minutes or by application of turmeric powder on the mouth of the leech it gets detached from the site.

Jalaukavcharan was done for 10-12 times, with interval of 3 days, approx. 3 *jalauka*'s were applied at a time. Around 15-20cc of blood was sucked by 3 *jalauka*'s. With the help of *jalaukavcharan* and some internal medications like *Arogyavardhini vati* 2BD (detoxification of body), *Tb. Rubyclin* 2BD and *Mahamanjishtadi kwath* (for blood purification) was given along with the previous medicines i.e *Tb. Xarelto* 2.5mg 1BD (anticoagulant) and *Tb. Pletoz* 50mg 1BD (for intermitant claudication) the discoloration and pain over the index finger was reduced significantly. Pain relief was measured on VAS scale.

PATHOPHYSIOLOGY :**RESULT:**

Jaloukavcharana is mainly used for the treatment of *Raktaja* and *TwakRoga* (blood-related disorder or skin disorder) in children, old, aged people, patients contraindicated for surgery. The ayurvedic texts consider the primary cause of skin disease is *Raktadushti* and the patient get relief after letting out the vitiated *rakta* (blood). In this case, improvement was seen in discoloration and pain over the tip of index finger. Along with *Jalaukavcharan*, internal medications (Ayurvedic as well as previous allopathic medicines) were also given to the patient.

DISCUSSION:

Leech therapy is regarded as a unique and effective form of bloodletting suitable for all individuals, including women, children, the elderly, and those with low pain tolerance. It helps drain impure blood and is beneficial for conditions related to *Pitta dosha*, various skin disorders, and inflammatory issues. In the *Sushruta Samhita*, specifically in chapters 12 and 16 of the *Chikitsasthana*, *Sushruta* endorses leech therapy for treating inflammatory, suppurative, and painful conditions, emphasizing its role in pain relief and suppression of suppuration. In modern medicine, *Jalaukavacharan* is recognized as Hirudo Therapy or medicinal leech therapy (MLT). Among the approximately 650 leech species, *Hirudo medicinalis* is the most commonly used, typically harvested from freshwater environments. The therapeutic benefits of leech therapy are primarily attributed to the diverse bioactive compounds found in leech saliva. Key constituents include:

- Hirudin: A potent anticoagulant that inhibits thrombin.
- Hyaluronidase: Enhances tissue permeability and absorption of injected medications.
- Calin: Inhibits platelet aggregation, improving blood flow.
- Destabilase: Affects clot structure, promoting breakdown.
- Eglins: Provide anti-inflammatory effects.
- Decorsin: Affects vascular smooth muscle, promoting vasodilation.
- Hirustatin: Offers pain relief.

These bioactive compounds confer a range of effects, including analgesic, anti-inflammatory, platelet inhibitory, vasodilatory, thrombolytic, anesthetic, and antimicrobial properties. Consequently, leech therapy has found applications in various fields, including plastic and reconstructive surgery, where it assists in venous drainage and reduces the risk of tissue necrosis.

CONCLUSION:

Raynaud's phenomenon is a condition characterized by the narrowing of blood vessels in the extremities, leading to restricted blood flow. This condition typically affects the fingers and toes, with episodes triggered by cold temperatures and emotional stress. During an attack, the small blood vessels in these areas constrict, which can result in numbness and a sensation of cold, sometimes described as freezing. Sometimes prolonged vasospasm may cause ischemic ulcer and gangrene⁽⁸⁾. In Ayurvedic terms, Raynaud's phenomenon is associated with a blockage in the body's channels, referred to as *siras*. This blockage can lead to symptoms known as *suptata* (numbness) and *stabdhatata* (stiffness), which may be followed by *dourbalya* (weakness). Over time, these symptoms can contribute to decreased functionality of the hands and feet. Ayurvedic treatment for Raynaud's phenomenon focuses on reversing the condition naturally. One effective approach is *Raktamokshana*, a detoxification technique in which leeches are employed. The therapeutic use of leeches helps enhance blood circulation and remove blockages, thereby alleviating symptoms and promoting overall well-being. So by above case study we can say that there is an effective role of *jalaukavcharana* in treating Raynaud's disease.

BEFORE ,DURING AND AFTER TREATMENT PICTURES:



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