

Effect of *Jalaukavcharna* in *shatropa* w.s.r. to Glomus Tumour:

A case study.

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Abstract:

Aims:

1. Evaluation of efficacy of *jalukavcharna* with special reference to glomus tumour.
2. To study the management of pain by application of *jalauka* in glomus tumour.

Background-

Glomus tumour is a specialized arteriovenous communication surrounded by smooth muscle cells and large epithelioid or cuboidal cells, glomus cell. The sensory nerves (both myelinated and non myelinated) end at these

epithelioid cells make this tumour very much painful.

Even the slight pressure well gives rise to an excruciating pain. The commonest site of this tumour is just beneath the nail and near finger tips.

It looks like a small reddish blue spot. Which does not blanch on pressure as a hemangioma?

Local injury leads to inflammation and congestions. So there will be a painful bluish mass located under nail bed.

The symptoms of patient have a characteristic triad:

- Pin point pain.
- Pin point tenderness.

- Cold intolerance.

Case description-

A 21 year old female patient came in shalya department with complaint of sever pain in lt. hand ring finger since 1 month. Pain increase during movement and cold intolerance.

On the baies of above complaint patient selected for *Jalaukavcharna* and treated as per the *Acharya Shusruta* three times with three follow up.

As per the Morden science treatment for glomus tumour is analgesic and complete surgical excision; which was some adverse effect on human body.

If not treated glomus tumour pain in time then patient become restless and anxious due to pain.

The features of glomus tumour resemble the features of “*shatroga*” described in *Ayurveda* by *Acharya sushrut* and *Asthang haridiya*.

There are many treatment modalities in *Ayurveda* for “*Shatroga*” available.

Jalaukavcharna is important measures in this study we have used a *jalaukavcharna* as a reducing pain as a palliative treatment.

Single case study of glomus tumour was taken and *Jalaukavcharna* was used.

Observation and assessment were done and conclusion wase drawn.

Jalaukavcharna was found to be significantly effective in reducing the symptoms of “*shatroga*” that is glomus tumour.

Key words: Glomus tumour, *Jalaukavcharna*, pain, *Acharya Sushrut*, *Shatroga*, ,

Introduction:

Glomus tumour arises from a cutaneous glomus composed of tortuous arteriole which communicated directly with a venule, the vessels being surrounded with a network of small nerves.

These specialised organs regulate the temperature of skin and found in the limbs especially the nail beds.

The lesion has a bluish ting due to the blood content and the subungal lesions are usually 1-2mm in size.

The pain is burning in nature and radiates peripherally and is move often noticeable when the limb is exposed to sudden changes in temperature.

These features of glomus tumour is resemble as features of “*Shatroga*” which is describe in *Sushrut samhita* (Su.Ni.13/19) and *Asthang Hiridiya* (A.H.U.31/32)

नखमांसमाधिष्ठाय पित्तं वातश्च वेद्राम् ।

करोति दाहपाकौ च तं व्याधि चिप्पमादिशेत् ॥

तदेव क्षतरोगाख्यं तथोपनखमित्यपि ॥

सु. नि. १३/१९

Jalaukavcharn is considered as most unique and most effective method of letting and safely indicated in all mankind including patients with poor threshold to pain. Because complete surgical excision of glomus tumour is high recurrence rate and post operative complication like difficulty of finger movement is more.

So in today's busy life style, palliative treatment with *jalaukavcharna* is more effective in terms of cosmetically and pain reducing.

As per Acharya *Sushrut* (Su.Su.13/1-24) *Jalauka* not only removes impure blood from body but also inject biological active substance. Which is present in its saliva which helps in reducing, pain, inflammation, tenderness and induration.

Objectives:

1. To evaluate effect of *jalauka* in “*shatroga*” with respect to glomus tumour as 3 follow up.
2. To find and develop a new palliative treatment in terms of pain management.

Material and Method:

Shalya Tantra is one of the important eight branches of *Ayurveda* in which surgical and Para-surgical techniques are described for management of various diseases.

Glomus tumour is an ailment that affects all economical groups of population.

Jalaukavcharna is root back in ancient civilization.

It was a prevalent form of therapy in various ailments.

The novel *Ayurveda* text *Sushrut samhita* devoted a complete chapter on *jalaukavcharna*.

This paper summarizes effect of *jalaukavcharna* in glomus tumour.

This is most delicate method of *raktamokshana* is *jalaukavcharna*.

So, we decided to use a *jalauka* for bloodletting in “*shatroga*” with special reference to glomus tumour. (Su.Chi.20/9-10)

Method of Study

1. Selection of the patient

For a case study purpose patient is selected from *Shalya tantra* OPD.

चिप्य (प्प) मुष्णाम्बुना सिक्तमुतकृत्य
स्त्रावयेद्विषक् ।

चक्रतैलेन चाभ्यज्य सज्जचूर्णेन चूर्णयेत् ॥

बन्धेनोपचरेच्चैनमशक्यं चाग्निना दहेत् ।

मधुरौषधिसिद्धेन ततस्तैलेन रोपयेत् ॥

सु.चि.२०/९-१०

Case presentation:

A 21 year old female patient came in *Shalya* OPD with

C/O-

- Sever pain in Lt. hand ring finger.

- Pain increase during movement.
- Cold intolerance.

Since one month.

O/E-

- Sever tenderness at Lt.hand index finger +++
- Bluish Spot on nail of Size near about 3mm.
- Mild induration present at distal phalanx.
- Bluish spot not blanch on pressure.

H/O-

- History of trauma at Lt.hand ring finger 6 month ago.
- No H/o- HTN, D.M, KOCH'S, B.A, Major illness.
- S/H- T.L done 1 year ago.
- Addiction- Not any.

GENERAL EXAMINATION –

G C-Good, Afebrile.

Bp-130/90 mm of hg

PR-80/min

R/R-18/min

SYSTEMIC EXAMINATION-

RS-AEBE clear

CVS-S1S2 normal

CNS-Conscious, oriented.

The following treatment given to a patient-

- 1) Mahamanjistha kawatha 10 ml BD.
- 2) Amruta Guggul 2 BD.
- 3) Nirgundi taila for local application.
- 4) Jalaukavcharna done three times with three follow up. (D0, D4, D7) , with interval of three days.

Jalaukavcharna vidhi:

Jalaukavcharna vidhi is done as per the *Acharya sushruta* mentioned in *Sushrut samhita sutra sthana*.

With the use of one *jalauka* 5-10 ml of bloodletting was done.

Three times *jalaukavcharna* done with three follow on (D₀, D₄, and D₇) and interval of three days.

Cleaning and dressing of *jalaukavcharna* wound site with *Haridra* powder.



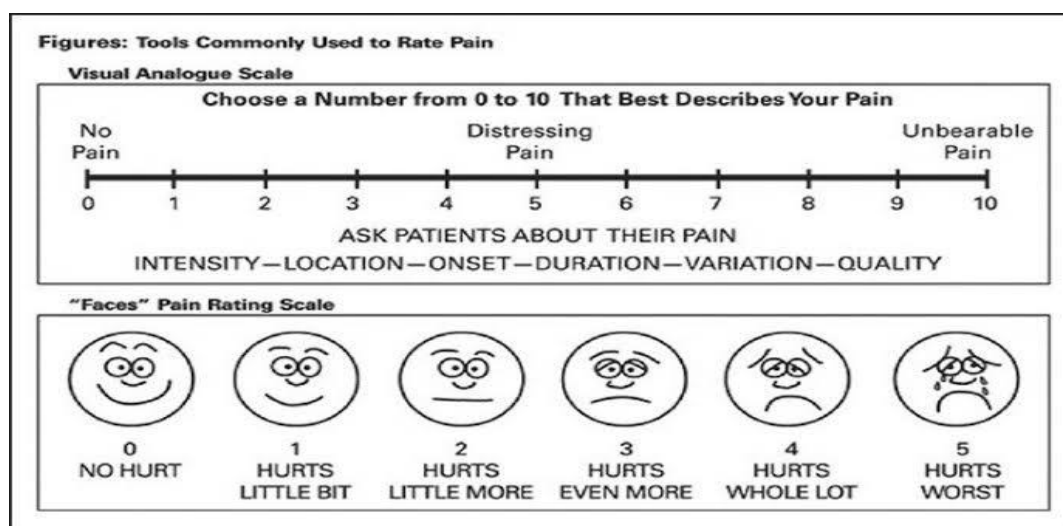
Figure 1 *Jalaukavcharna Vidhi*

Assessments criteria:

- Criteria as pain band tenderness , erythema were assessed by different grading system.
- Mild, moderate, and sever grading were done according to standard protocol.

Objective Criteria**1. Pain**

V.A.S (Visual Analogue Scale) is applied.



Observation	V.A.S Score
No pain	0
Mild pain	1
Moderate pain	2
Sever pain	3

2. Erythema

Clinical observation	Score	Grades
No evidence of erythema	0	0
Pinkish discoloration	1	+
Definite Bluish locally	2	++
Gross discolouration with itching.	3	+++

3. Tenderness

Clinical observation	Score	Grades
Absent	0	0
Mild pain tolerable pain	1	+
Moderate tolerable pain but patient is in visibly agony	2	++
Severe pain with crying and wincing, with drawn of arm	3	+++
Touch at the site unbearable	4	++++

Observation and result – This study done on a single patient of *Shalaya Tantra* department (OPD) observation is as below.

Table No: 1 (% Relief in all symptoms and Total effect in %)

Sr.No	Symptoms	Mean		Mean Difference	% Relief
		BT Score	AT Score		
2	Pain	3	1.5	1.5	50
3	Erythema	3	1	2	66.66
4	Tenderness	3	1	2	66.66
Total effect in% -61.10%					

In this case study there is significant improvement was observed in all the parameters like tenderness, erythema, pain. The percentage relief on symptoms has been observed.

In this case study effect of therapy shows effect of therapy 61.10 % relief in patient. This shows the effect of *Jalaukavcharna* in *Shatropa* that is glomus tumour is significant.

Discussion:

1. Pain and tenderness-

The present study revealed that the *jalaukavcharana* is significantly, effective in terms of pain. Due to its *snigdha gunatmak* it is *vatashamak*.

The anti-inflammatory and analgesic properties of leech in many aspects are associated with the blockage of amidolytic and kininogenase activities of plasma kallikrein resulting in prevention pain or pain relief.

Leech may also secrete a vasodilative, histamine like substance, which increase inflow of blood after a leech bite and reduce local swelling.

The *jalauka* constitute hyaluronidase which is spreading factor, can degrade tissue hyaluronic acid thus facilitating the infiltration and diffusion of remaining ingredients of leech saliva into congested tissue work as potent analgesic and anti-inflammatory so *jalauka* is very effective in terms of reducing pain.

2. Erythema

Jalauka was found to be effective in reducing erythema (Bluish spot).

It is *pittashamak* effect by its *sheetaguna* and help in reduces discolouration.

The present leeching largely potentiates tissue decongestion and also relieve capillary network work which decrease venous congestion positive changes of local hemodynamic and improvement of hemorheology will increase oxygen supply and improve the tissue metabolism and elements the tissue ischemia.

Conclusion:

Jalaukavcharna reduces all cardinal features of glomus tumour. Thus it can be proven as potent pain reducing medicine.ios case study significant improvement within seven days with three follow up in erythema, pain and tenderness were reduced significantly

This therapy is done in a single patients with three follow up (D0, D4, D 7).

According to mentioned in *Ayurvedic* literature no adverse reaction is found after leech therapy.

In this case study significant improvement within seven days with three follow up in erythema, pain and tenderness were reduced significantly.

It is a single case study it can be stated that in this study *jalakavcharna* was found to be very effective in treatment of glomus tumour.

Jalauka are easily available, relatively cheap and have no obvious adverse effects. It is certainly more desirable as a palliative treatment in terms of reducing pain.

To validate the study another study with large no of participants is much needed.

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