

**ASSESSMENT OF EFFECTIVENESS OF JALOUKAVACHARAN IN
THE MANAGEMENT OF SUPRASPINATUS TEAR****Dr. Namrata Balu Lubal^{*1}, Dr. Tazeen Choudhary² and Dr. Sanjeev Yadav³**¹P.G. Scholar, (Department of Shalya Tantra), ²P.G. Scholar, (Department of Shalya Tantra),³Professor, (Department of Shalya Tantra)Dr. G.D. Pol Foundation's Y.M.T. Ayurvedic Medical College and Hospital, P.G. Institute-
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and Hospital, P.G. Institute-
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Navi Mumbai, Maharashtra,
India.**ABSTRACT**

Among orthopedic injuries, supraspinatus tears carry with them a high burden for both patients and healthcare providers. Among the rotator cuff injuries, supraspinatus muscle tears were found to be common and occurred in majority of the patients (61.9% men and 38.1 % women). Supraspinatus tears are so common in >60 years, and 70% of those who exceed the age of 80 will bear these sequelae. The supraspinatus muscle plays a crucial role in abduction, flexion and rotation of arm. When this muscle fibres becomes damaged or torn, it can significantly impact shoulder's function and mobility. Tears can range from partial to complete, with varying degrees of severity. Leech therapy or Jalaukavacharana is a commonly used ancient Ayurvedic practice that has been performed throughout history for treating different medical conditions. Hirudotherapy comprises the use of certain species of bloodsucking leeches, which are applied to particular locations on your body that suck out unhealthy blood besides other toxins. For past couple of years, Jalaukavacharana has sparked interest in medical field again. This article explores application of Jaloukavacharan in

management of supraspinatus tear.

KEYWORDS: Supraspinatus tear, Jaloukavacharan, leech therapy, Raktamokshana.

INTRODUCTION

Supraspinatus tears, which are both the most common rotator cuff tear and among the broadest demographic at risk for this injury (as active adults from all walks of life may be affected), remain a challenge to effectively manage. While certain ancient therapeutic practices compete with more modern treatments such as physiotherapy and surgical intervention, some of the latter continue to be researched by scientists and embraced into patient care. Jaloukavacharan (application of medicinal leeches) emerges as one such unconventional but effective treatment. Supraspinatus tears often result from: Repetitive overhead motions, Acute trauma or injury, Age-related degeneration, Poor posture or improper lifting techniques. Symptoms of supraspinatus tear are pain (a dull ache in the shoulder, which can worsen with arm movement or when lying on the affected side.), limited range of motion, weakness (Lifting your arm or performing everyday tasks may become challenging due to decreased strength.), night time discomfort etc. Raktamokshana, often known as bloodletting, is an ancient and crucial parasurgical practise used in Ayurveda to treat a variety of ailments. Sushrut Samhita recommends If the symptoms worsen not withstanding correct treatment of the vitiated Doshas, using Raktamokshana, which takes into account the role of the Rakta- Jaloukavacharan (leech therapy) is a local Raktamokshana technique that is simple to use. Considering all these facts, this study is planned to study the scientific explanation about therapeutic effect of Jaloukavacharan in the management of supraspinatus tear.

- स्नेहादिभिः क्रियायोगैर्न तथा लेपनैरपि |यान्त्याशु व्याधयः शान्तिं यथा सम्यक् सिराव्यधात् || (सु.शा. ८/२२)
- सिराविषाणतुम्बैस्तु जलौकाभिः पदैस्तथा |अवगाढं यथापूर्वं निर्हरेद्दुष्टशोणितम् ||अवगाढे जलौका स्यात् प्रच्छन्नं पिण्डिते हितम् |सिराङ्गव्यापके रक्ते शृङ्गालाबू त्वचि स्थिते ||(सु.शा. ८/२५,२६)

CASE REPORT

A 37 year old male patient came to YMT hospital with c/o pain & stiffness at left shoulder joint since 1.5 years, mild tingling sensation in left hand since 1 year.

Clinical findings

- Painful abduction after 40°
- Pain during external rotation +++
- Tenderness over tip of shoulder joint+++

Patient diagnosed with supraspinatus tear. Diagnosis confirmed with following MRI Report.

•MRI-left shoulder (Plain)

T2W + PDFs hyperintense signal within the anterior fibres of supraspinatus tendon in the footprint at 11 o'clock position without any retraction of fib Findings are most likely suggestive of full thickness partial tear is the anterior fibres.

Thickening involving the supraspinatus tendon, suggestive of tendinopathy, Mild effusion in the subacromian & subdeltoid bursa.

Mild acromioclavicular joint arthropathy.

Lateral downslopping of acromion indenting the bursal surface of supraspinatus tendon, suggestive of impingement syndrome.

AIM AND OBJECTIVES

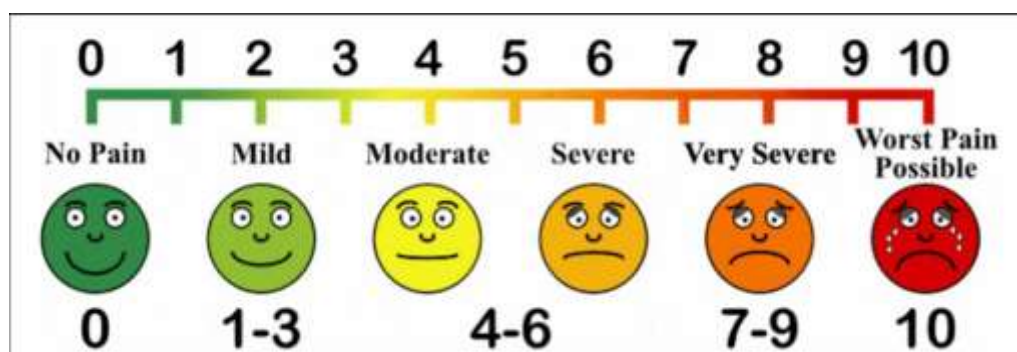
To assess the effect of Jaloukavacharan in management of supraspinatus tear.

MATERIAL AND METHOD

Criteria of assessment

Clinical observation	Absent	Mild	Moderate	Severe
Pain	0	+	++	+++
Difficulties in movements (ROM)	0	+	++	+++
Tenderness	0	+	++	+++

Pain VAS Scale



Therapeutic interventions

Patients was admitted in YMT ayurvedic hospital from 15/02/2024 to 01/03/2024 and proper counseling, written consent taken after explanation of line of treatment. In this period patient was treated with Jaloukavacharan and internal ayurvedic medication with panchatikta ghrita guggul 250mg 2tds, cap ksheerbala oil 1bd, cap curcued 1bd, mahavatvidhwansa rasa

250mg 1bd with sarvang snehan(murchhit tila taila) swedan (steam bath), yoga basti (anuvasana with dashmool taila & niruha with eranda dashmool kwath) and manyabasti(with ksheerbala taila).

1st sitting of Jaloukavacharan was done on 19/02/2024 and 2nd sitting was done on 18/04/2024. During this therapeutic period criteria like pain, tenderness and range of movements was assessed in pre procedure and post procedure completion.

Jaloukavacharan Procedure

Leeches, gauze piece(dry/wet), turmeric, sterile needle etc.

The patient is made to lie down, affected area is washed with clean water. Then the selected leech is kept over the affected area to bite and suck the blood. And retained with soft, white, moist cotton cloth is kept over it. Post-leeching Procedure involving separation of leech; vomiting of leech and control of bleeding.

RESULT

After 1st sitting of Jaloukavacharan pain, tenderness, was reduced from moderate to mild level. With that range of movements like external rotation, abduction was improved from severe to moderate level.

After completion of whole treatment of internal medication and jaloukavacharan parameters like pain, tenderness was absent at shoulder joint. Range of movements like abduction improved from 40° to 80°, external rotation from 50° to 90° which was markedly improved.

Criteria of Assessment	Before Jaloukavacharan	After Jaloukavacharan
Pain	+++ (severe)	Absent
Tenderness	+++ (severe)	Absent
Range of movements		
External rotation	50°	90°
Abduction	40°	80°

DISCUSSION

Jaloukavacharan with ayurvedic medicine intervention could provide comprehensive approach in management of supraspinatus tear. Leeches saliva contains hirudin which is anti-inflammatory, in nature reducing inflammation surrounding area and improving blood supply to muscle, also acting as a analgesic by relieving pain at site, offering localised treatment. Ayurvedic herbs used Panchtikta ghrita guggul, curcueda, mahavatvidhwansa rasa, also has

anti-inflammatory which reduces inflammation systematically, also the contents of drugs like amla increases blood circulation and support tissue regeneration combining these treatments can robust the anti-inflammatory effect by systematically and also locally, and enhancing the delivery of nutrients, oxygen to affected area.

CONCLUSION

Leech Therapy an ancient Ayurvedic practice with internal medication combining therapeutic interventions which has shown some encouraging results in pain reduction, improved range of movement and can speed up the healing process. While additional studies are required to fully understand the mechanisms and refine treatment protocols, evidence suggests that Jaloukavacharan with therapeutic intervention may be an effective option. When deciding on supraspinatus tears treatment options speaking to an Ayurvedic specialist about jaloukavacharan might be beneficial. We may be able to provide a voice of hope for patients looking at alternatives like chiropractic care offering functional improvement and symptomatic relief through a natural, conservative approach that is in harmony with the body.

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