

# Internal Use of Ajan Vruksha/ Khandu Chakka (*Ehretia Laevis Roxb*). Plant Leaves Powder in Shoulder Pain Management. – Case Report

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## Abstract

**Introduction**— Shoulder pain and stiffness are common features among working women. It is affecting their day to day life style.

**The main symptoms of the patient and the important clinical findings:-** Patient was suffering from severe pain in right shoulder with restricted movement of right shoulder from 8 days. Patient was assessed by ( SPADI) Shoulder Pain & Disability Index.

**The main diagnoses, therapeutics interventions, and outcomes:-** *Ehretia Laevis Roxb.* leaves powder capsules was made up of 250 mg. Patient was advised to take two capsules in morning and two capsules at night after food. Daily 1 gm powder was administered internally for 7 days

On the day zero pain score was 80%, on third day of treatment pain score was 54% and on seventh day pain score was 0. On the day zero disability score was 95%, on third day disability score was 55% and on seventh day score was 0.

**Conclusion**— Patient cured from pain and shoulder disability by internal use of *Ehretia Laevis Roxb.* leaves powder within seven days.

**Key Words:** - Pain Management, Khandu Chakka, Ajan Vruksha, *Ehretia Laevis Roxb.* Shoulder Pain.

## Introduction

Shoulder pain and stiffness are common features among working women. It is affecting their day to day life style. Musculo skeleton pain is major burden on individual and health care system

The prevalence of shoulder pain in the United Kingdom population was 7% <sup>(1)</sup>.

1069 subjects were participated in the study, 245 (22.9%) reported with shoulder pain in Rohtak District of Northern India. <sup>(2)</sup>

Shoulder pain causes inability to do daily routine

work. Prevalence of shoulder pain is as 67 percent for whole life. The incidence of shoulder pain is between 0.9%-2.5% and prevalence rate is from 6.9-26% for point prevalence to 6.7-66.7% for lifetime prevalence.<sup>(3)</sup>

Shoulder pain may caused by bursitis & tendinitis, tear of tendon, arthritis, fracture, malignancy, infection, and neurotic problems.

Common treatment including avoiding overexertion or overdoing activities, involves rest. medications, surgeries.

*Ricinus communis* & *Commiphora Mukul*, *Boswellia serrata*, *Withania somnifera*, *Dashamool*,

*Mahayograj Guggul, Vatavidhwansa, Yograj Guggul, Suvarna Bhasma commonly used for pain management in Ayurveda.* (4)

Analgesic drugs act on the peripheral and central nervous systems. Painkillers include (NSAIDs) such as the salicylates, ibuprofen & COX-2 inhibitors, opioid drugs such as morphine and oxycodone, and acetaminophen.

Leaves and Bark of *Ehretia Laevis* Roxb. is being traditionally used for Pain Relief, wound healing and minor fracture. (5)

*Ehretia Laevis* Roxb. contains chemical compounds like Naphthoquinone derivative, Baurenol, ursolic acid, Rutin, Phytol,  $\alpha$  and  $\beta$  amyryn, Betulin & Betulinic acid, Lupeol,  $\beta$ -sitosterol, Histidine, Hexadecanoic acid, Benzoic acid, Arachidonic acid show analgesic, antinociceptive and anti inflammatory activities. (6)

It has anti microbial properties (7-8) and its wound healing (9) property is also proven on scientific ground.

**Patient Information:-** Mrs. Archana Dilip Sawarkar Age-42, Sawangi(M) Wardha,(MS) India was reported at MGACH & RC Salod(Hi), Wardha(MS) with severe pain in right shoulder with stiffness.

**Clinical Findings:-** Patient was suffering from severe pain in right shoulder with restricted movement from 8 days. She has taken hot fomentation at her house but did not get any relief. There was no history of trauma, old injury, diabetes mellitus, and hyper tension.

**Timeline:** - Patient was suffering from severe pain in right shoulder from 8 days.

**Diagnostic Assessment:-** Patient was investigated for complete blood culture, Random Blood Sugar, Kidney Function Test, Liver Function Test, Lipid Profile, Serum Calcium, Rheumatic Arthritis. All tests were within normal limits.

Patient was assessed by ( SPADI) Shoulder Pain & Disability Index (10). on first, third and seventh day.

**(SPADI) Shoulder Pain and Disability Index**

**Pain scale**

**0 = no pain to 10 = the worst pain imaginable**

**Table:- 1**

|   | Day- 0        | Day- 3rd       | Day-7th |
|---|---------------|----------------|---------|
| At its worst?                           | 8             | 6              | 0       |
| When lying on the involved side?        | 8             | 6              | 0       |
| Reaching for something on a high shelf? | 8             | 5              | 0       |
| Touching the back of your neck?         | 8             | 5              | 0       |
| Pushing with the involved arm?          | 8             | 5              | 0       |
| Total Pain score                        | 40/50X50= 80% | 27/50X100= 54% | 0%      |

**Disability scale****0 = no difficulty to 10 = so difficult****Table:- 2**

|  | <b>Day-0</b>              | <b>Day-3<sup>rd</sup></b> | <b>Day-7<sup>th</sup></b> |
|--|---------------------------|---------------------------|---------------------------|
| 0 = no difficulty and 10 = so difficult it requires help. Washing your hair? | 8                         | 5                         | 0                         |
| Washing your back?   | 10                        | 5                         | 0                         |
| Putting on an undershirt or jumper?  | 10                        | 5                         | 0                         |
| Putting on a shirt that buttons down the front?                              | 10                        | 5                         | 0                         |
| Putting on your pants?   | 9                         | 5                         | 0                         |
| Placing an object on a high shelf?   | 10                        | 5                         | 0                         |
| Carrying a heavy object of 10 pounds (4.5 kilograms)                         | 10                        | 7                         | 0                         |
| Removing something from your back pocket?                                    | 9                         | 7                         | 0                         |
| <b>Total Disability score</b>  | $76/80 \times 100 = 95\%$ | $44/80 \times 100 = 55\%$ | 0%                        |

**Total SPADI Score****Table:- 3**

|                          | <b>Day -0</b> | <b>Day-3<sup>rd</sup></b> | <b>Day-7<sup>th</sup></b> |
|--------------------------|---------------|---------------------------|---------------------------|
| <b>Total SPADI Score</b> | 89.23 %       | 54.61%                    | 0 %                       |

**Therapeutic Intervention:-** *Ehretia Laevis Roxb.* leaves were shed dried, powdered and filled in capsules in GMP And FDA approved Dattatrya Ayurved Rasashala Wardha(MS). Each capsules was of 250 mg. Patient was advised to take two capsules in morning and two capsules at night after food. Daily 1 gm powder was administered internally for 7 days.

**Follow-up and Outcomes:** - Patient's shoulder pain was assessed on the day of reporting, 3<sup>rd</sup> day and

on seventh day by Shoulder Pain and Disability Index (SPADI). On day zero when treatment started SPADI was assessed. On the day zero pain score was 80%, on third day pain score was 54%. Within three days patient got significant pain relief. And on seventh day score was 0%. Patient got complete relief from pain.

On the day zero disability score was 95%, on third day disability score was 55%. Within three days patient got significant relief from disability. And on seventh day

disability score was 0%. Patient got complete relief from disability on seventh day along with complete relief from pain.

Patient cured from pain and shoulder disability by internal use of *Ehretia Laevis Roxb.* leaves powder within seven days.

### Discussion

*Ehretia Laevis Roxb.* plant is a being used for various ailments traditionally. It is commonly used for pain relief, wound healing and minor fractures.

Velappan et al experimented methanolic extract (500 mg/kg) of the *Ehretia Laevis Roxb.* leaves in mice, and found that it reduces paw volume by 56%, paw oedema to 60%<sup>(11)</sup>.

N.Jyothirmai et al stated that the chloroform, methanolic and aqueous extract of *Ehretia laevis* reduces inflammation in animal model.<sup>(12)</sup>

Subodh et al shown anti arthritic activity of medicated oil of *Ehretia Laevis Roxb.* leaves by local application in human beings.<sup>(13)</sup>

Internal use of *Ehretia Laevis Roxb.* leaves powder is tested first time in this study for pain management in shoulder pain and assessed by (SPADI) Shoulder Pain & Disability Index And found very effective without any untoward side effects. Patient got near about 50% relief for his complaints within three days of administration and complete relief within seven days.

This study will pave the path for further study of internal use of *Ehretia Laveis Roxb.* in various ailment including pain management.

Also use of this herbal plant in pain management will minimise the side effects of modern medicine like Non-steroidal anti-inflammatory drugs.

**Patient Perspective:-** :- Patient was very happy as she got complete relief from pain and disability of her shoulder without using modern medicine and side effects of modern medicine was avoided.

**Conflict of Interest:-** Nil

**Source of Funding:-** Self

Consent of Patient:- Taken

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