

## A CASE REPORT – EFFICACY OF VARATIKA BHASMA IN THE MANAGEMENT OF KANDA BHAGNA WITH SPECIAL REFERENCE TO HAIRLINE FRACTURE

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Article Received on  
24 Dec. 2016,

Revised on 14 January 2017,  
Accepted on 05 February 2017

DOI: 10.20959/wjpr20173-7831

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### ABSTRACT

The word fracture means breaking(discontinuity) of a bone. Incidence of fracture increasing in India, in part due to increases in lifespan, urbanization and trauma. In Ayurveda some drugs are available they have property of **Asthibhagna prarohan** that means faster healing of fracture and joining of two ends of bone. A male patient of age 25 years old came in OPD of Shalyatantra department of M.A. Podar Hospital, Mumbai with complaints of pain, swelling and restricted movement of right forearm with simple fracture(Kandabhagna) treated with use of Varatika Bhasma as said by Kaviraj Shree Govind Das Sen

In Bhaishajya Ratnavali and immobilization of forearm. It shown remarkable result in healing of fracture by influencing early regeneration of all connective tissues involved in healing and quicker mineralization achieved.

**KEYWORDS:** Asthibhagna prarohan, Kandabhagna, Varatika Bhasma.

### INTRODUCTION

Bones are rigid but they do bend or 'give' somewhat when an outside force is applied. Fracture is a break in the continuity of a bone or loss of normal anatomical continuity of a bone. The term covers hairline and even microscopic fracture to the highly comminuted fracture. In simple fracture, fracture is not communicated with external skin. According to modern medicine, **immobilization** is the main treatment that helps in natural healing. It takes longer time so longstanding treatment affect the day today work of human being. But nowadays human being attract towards the early healing of fracture less time consuming therapy preferred. So he can join his daily work as early as possible early ambulation is

important. Therefore, study is planned to evaluate effect of **healing property** of Varatika Bhasma in the patient suffering from fracture.

**AIM:** To study the clinical effect of Varatika bhasma in the management of Kanda Bhagna with special reference to Hairline Fracture.

## OBJECTIVES

1. To study the healing property of Varatika Bhasma in the management of fracture.
2. To study the mechanism of action of Varatika Bhasma in the healing process of Kanda Bhagna.

## MATERIALS AND METHOD

### Detail Plan and Protocol

**Centre of Study:** Post Graduate Department of Shalya Tantra R.A. Podar Medical (Ayu) College & M.A. Podar Hospital, Worli, Mumbai.

A male patient of age 25years selected from Shalyatantra OPD of M. A. Podar Hospital, Worli, Mumbai 18.

Name- A.B.C. (25yrs / male)

Date - 03/12/2016

OPD No.- c/ 6827

Diagnosis –Hairline Fracture of shaft of (R)ulna.

c/o – Pain over right forearm

Swelling over right forearm

Restricted movement of right forearm

H/O-Fall on right forearm from bike in morning

X Ray right forearm AP and LAT view–Hairline fracture of (R) ulna.

**Consent:** A well informed written consent of patient was taken before starting the treatment.

**Duration of therapy:** 4 weeks

**Dose of Varatika Bhasma:** 250 mg OD

**Anupan:** Godugdha

**Follow Up** - 1 month at the interval of 15 days.

**CRF:** Record of the Patient including the study is documented to meet all the requirements of the clinical study.

**Varatika (Marine Shell)**

**Varga:** Sadharan Ras Varga

**Paryaya:** Kaparda, Varatak, Balkridanaka, Charachar

**Chemical compound:** Calcium Carbonate ( $\text{CaCO}_3$ )

**GRADATIONS/ CRITERIA FOR ASSESSMENT OF PARAMETERS**

**1) Pain**

**Visual Analogue Scale:** The following scale was used to help out assessing the severity of pain. Patients were asked to locate a finger at any of the numerical over the scale and the severity of pain was assessed according to that for which the numerical are labeled.

0	1	2	3	4	5	6	7	8	9	10
No pain	Mild		Discomforting		Disturbing		Horrible		Excruciating	
Nil	Mild		Moderate				Severe			

Grade 0 - No pain

Grade 1 - Mild Pain

Grade 2 - Moderate

Grade 3 - severe

**2) Tenderness**

Grade 0 - No tenderness

Grade 1 – Patient feels pain on touch

Grade 2 – Wincing of face.

**3) Swelling**

Grade 0 - No

Grade 1 - Mild

Grade 2 - Moderate

Grade 3 - severe

**4) Restricted movements**

Grade 0-all movements

Grade 1-Mild Pain on movements

Grade-2- Severe Pain on movements

Grade 3-Unable to move

## 5) CALLUS FORMATION

Callus formation can be assessed by X-ray radiographs.

G-0: Hard Callus.

G-1: Soft Callus.

G-2: No Callus.

## OBSERVATION AND RESULT

Sr.No.	Criterion	Before treatment	After treatment
1.	Pain	3	1
2.	Tenderness	2	1
3.	Swelling	2	0
4.	Restricted Movement	2	1
5.	Callus Formation	2	0

After Clinical study, Patient shows significant decrease in Swelling and increase in Callus formation. Symptom of Pain, Tenderness and Restricted movement was also considerably reduced.

## DISCUSSION

Varatika bhasma has been explained in Asthibhagna prarohanam, as per mentioned by Bhaishajya Ratnavali.

### The probable mechanism of action of Varatika Bhasma may be explained as below

1. Varatika Bhasma contains calcium carbonate which influences quicker mineralization of the callus by early regeneration of all connective tissues of mesenchyma origin, namely fibroblasts, chondroblasts and osteoblasts.
2. Varatika Bhasma has greater impact on osteoblastic proliferation. It builds up the chemical composition of the fractured bone namely its mucopolysaccharides, collagen, calcium, phosphorus and as well its functional efficiency.
3. Mucopolysaccharides play an important role in healing by supplying raw materials for repair. As Varatika Bhasma causes greater accumulation of these raw materials, there is more rapid rate of healing. Also rapid utilization of these raw materials results in early completion of healing process.

It can be concluded that **VARATIKA BHASMA** can be effectively used in the management of **KANDA BHAGNA** i.e in Hairline Fracture.

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