

A Clinical Study to Assess the Efficacy of Nyagrodh Vati in Hairline Fracture (Astibhangna)

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Abstract

In this modern world of industrialization we are compromising our basic need of nutrition also cases of trauma are increasing as era becoming fast. Its leads into the hairline fracture physiological as well as pathological. This is the stress fracture now slowly becoming an infamous dilemma as more than 1million cases reported in India per year. Hairline fracture are minute crack on bone due to repetitive strain and excessive training.

The main treatment for any fracture is to immobilize for almost one or one and half months. In the classical text of Ayurveda we found many plants for fracture healing in BHAGNASANDHAN GAN. Nyagroth also one of them which helps in callos formation by inducing the periosteum membrane. Along with the POP cast it gives faster bone healing in 7-10 days which is more important. Therefore this topic is selected for the scientific study.

Keywords: Ayurveda; Nyagroth; Fracture

Introduction

"Vayadhitnam Vayadhi parimokash: Savasathasay Health Rakashanam F | " Sushruta "ekam shastram Adhiyano vidayata scripture Nishachayam". Tasamat Bahushar Tama Shastram Vijaniyat Chikitasak: | | "the Sushruta PR 1/47.

Shalyatantra, one of the branch of AYURVEDA, which is devoted to surgical specialty. Trauma(आघात) is one of the basic cause of injury which results in to the fracture.

Now a days trauma has become main cause as there is the wide spread of industrialization, where incident of accident resulting in fracture n soft tissue injury is higher.

A Fracture(अस्थीभग्न)is complete or incomplete break in continuity of bone or crack microscopic i.e. HAIRLINE or macroscopic.

Ayurvedic text have illustrated fracture as discontinuity of bone due to pressure. Fracture is classified in many parts of view, HAIR LINE FRACTURE is also one of the part of it.

Incidence of long bone fracture is higher thus demands special attention. The Management of long bone fracture runs as

- Reduction
- Retention
- Rehabilitation.

Even after following this principle fracture may leads into its complication such as malunion, non union, shorting of limb etc.

According to the modern principle of treatment it includes fracture is reduce immobilized & then role of medicine is very negligible only some NSAIDS n calcium supplements are given to fulfill the symptomatic demands. But in ancient treatment they had mentioned so many indigenous compounds which helpful in healing of fracture with reference of ASHTANG HRIDAYA su.15 AND SUSHRUT SAMHITA su.38.

A indigenous herb named NYAGROTH is also praised for BHAGNSANDHANA i.e. fracture healing hence the present study is proposed To study the efficacy of Nyagrodh in healing of fracture.

Aim and Objectives

- To study effect of nyagrodh in bhagn sandhana
- To evaluate the efficacy of nyagrodh in calus formation
- To evaluate the effect of nyagrodh in serum calicium level

Materials and Methods

Source of data

- Patients with simple long bone hairline fracture will be selected from Ashwin Rural Ayurvedic College and Hospital, Manchi Hill

- Samhita,modern books of surgery, orthopedics, physiology and pathology
- Journals, Magazines, Seminars, Conference, Digital library, web sites
- Pathological Radiological lab.

Materials required for study

Drug manufacturing- Nyagrodh churn vati Prepared as per classical reference of Sharangdhar Samhita under the supervision of Rasshashtra and B.K. Dravyaguna Department of Ashwin Rural Ayurvedic College and Hospital, Manchi Hill.

Drug standardization: Standardization of drug will approved and taken from authentic lab Nyagrodh (ँट) Latin Name: Ficus bengalensis

Family: Moraceae

Juice Kashay vipak- Katoo Cumshot Cold

Properties Order: Guru Receivers

Nayagarodhadi gun: varanaya: Sagarahi Bhaganasadhak: (su, su. 38)

Preparation of Vati Verses 1. EXTREMELY subtle UE Supishatham Textile Galitam.

Tasamat Churna: Kashod:.....

Lehavat wonhogudo or sugar

Guggulu wa kashipet element Nirmita Vati

Kurayat Vahnina sidhayen kavachit Guggulana Watim

Daravenamadhuna VAPI Guticam Karayet Wed (Sha. 7/ 2, 3)

Alapasay API Maharathatav Mahatasay Meager Karamatam

Kurayat Sashaleshavishalesh Call Rites Yukatibhi.

Inclusion criteria

- Simple Hairline fracture of long bone diagnosed by x ray
- Pt between 25-40 age group irrespective of sex

Exclusive criteria

1. Pt below 25-above 40yrs of age
2. Known case of systemic diseases (HIV,TB)
3. Multiple compound continuous fracture
4. Fracture associated with visceral injury.

Design of study

Patient will be examine thoroughly and radiograph will be used for diagnosis After confirmation patient will be registered in the OPD of college hospital and divided in to two equal groups.

A total of 60 diagnosed patients were randomly assigned in to two groups.

Group1 control one having 30 patients treated with MODERN BASIC TREATMENT OF HAIRLINE FRACTURE and Group 2 Trial 30 patients treated with NYAGRODH CHURN VATI Consent will be obtained from the patients who are register for trial.

Initially all the patients will treated with reduction and immobilization during the treatment patients will regularly observed

changes will noted in case paper The observation will be analyzed on the basis of assessment parameters both subjective and objective critically and scientifically before during and after the treatment 0-7-14-21-28 days finally result will be statistically evaluated for significance.

Administration of drug

Nyagrodh churn vati bd with honey after meal duration: Treatment will be continued till 21 days

Bheshajkala: Pashchat Bhakt

Follow Up: After Every 7days

Total Patient: 60

Treatment plan

Experimental GROUP: Nyagrodh Churn Vati

Treatment	Days	Form
Nyagrodh daddy	21	Vati with madhu
Pop cast	21	-

Table 1: Nyagrodh described as BHAGNASANDHANA IN SUSHRUT SAMHITA

Control group: Calcium supplement

Treatment	Days	Form
Calcium	21	Tablet 500mg
Pop cast	21	-

Table 2: Classical modern treatment for HAIRLINE fracture.

Results

A Pilot case study and action of NYAGHOTH VATI. The POP cast suppresses excessive inflammation and induces healthy granulation tissue formation by maintaining the proper perfusion. The calus formation depends on the periosteum which is a connective tissue membrane also precursor of chondroblast and osteoblasts.

Discussion and Conclusion

A Pilot case study and action of NYAGHOTH VATI.

There are various stages of fracture healing Inflammatory phase-Granulation tissue-Calus formation-Remolding phase. The POP cast suppresses excessive inflammation and induces healthy granulation tissue formation by maintaining the proper perfusion. The calus formation depends on the periosteum which is a connective tissue membrane also precursor of chondroblast and osteoblasts. Here Nyagroth helps in repairing the periosteum membrane which leads into osteoblast formation. In case of Tb. Calcium it needs normally 20-25 days for calus formation While Nyagroth induces calus formation in 7-10 days live a catalyst. Which is important in hairline fracture healing also [1-10].

It shows the efficacy of NYAGROTH VATI in hairline fracture.

On the other hand it is also helpful in simple osteoarthritis and post menopausal arthritis.

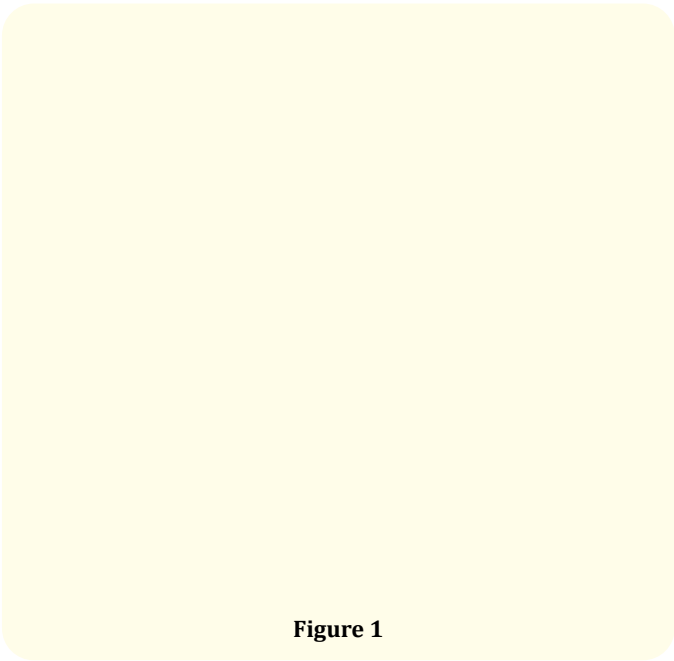


Figure 1

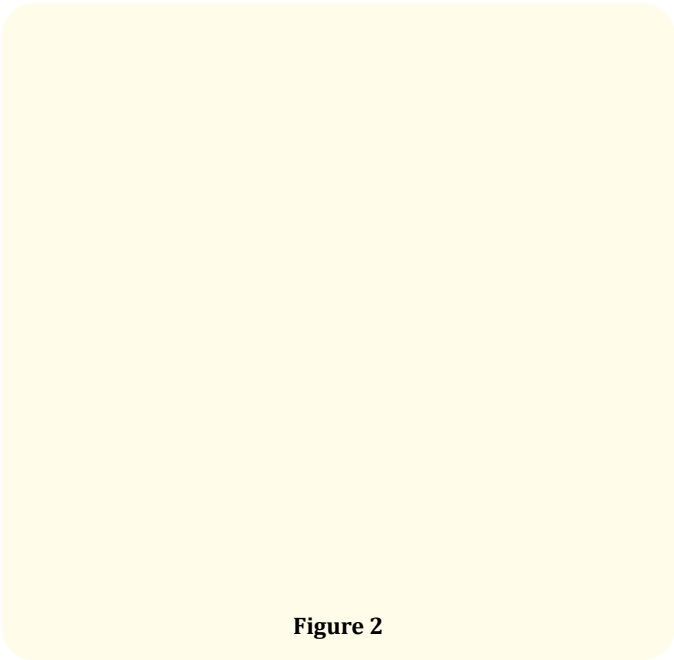


Figure 2

To Study The Efficacy of Nyagrodh Vati in Ashthibhagna w.s.r to Hairline Fracture.

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