



A LITRATURE REVIEW ON MANAGEMENT OF BHAGNA IN AYURVEDA

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ABSTRACT

Fracture is a linear deformation or discontinuity of bone produced by forces exceeding modular elasticity. Even Ayurveda text have illustrated fracture being the loss in the continuity of the bone due to pressure commonly result following accidents. Acharya Sushruta pioneer in the art and science of surgery has described widely and comprehensively about the Bhagna. This proved the depth of knowledge of the Acharya on the Bhagna. The father of surgery Acharya Sushruta has mention the treatment of Bhagna as Anchhana (Traction), Peedna (Manipulation), Sanshepna (Apposition) and Bandhana (Immobilization) which is yet practiced by modern orthopedic surgeon. More over a number of Ayurveda drugs are quoted in the management of fracture for locally to promote bone healing. Here in this article attempt to elaborate all the points of bhagna management in ayurveda.

KEYWORDS : Bhagna, Fracture, Skeletal Injuries, Sukhchestaprasara**INTRODUCTION**

Ayurveda is one of the most ancient Medical science of the world. It conceives and describes the basis and applied aspect of the life process health, disease and its management, in term of its own principles and approach.

Each and every human being desire to live happy and comfortable life, but it is impossible owing to multiple factors related with changing life style, environmental factors. Changing of life style of modern time has created several harmonies in his biological system. As the advancement of busy professional and social life, improper sitting etc. These all factors create undue pressure on the mind of man and cause of accidents involving fracture and soft tissue injury.

Wear and tear is a constant phenomenon in living beings new cells are formed and older are worn out at uniform rate. This process takes so smoothly that we are unaware of this. A fracture is also often associated with pathological changes bleeding soft tissue injury the management of fracture runs through the basic principle of fracture management that is Reduction, Immobilization, and Rehabilitation. These all are described by Acharya Sushruta thousand years ago which are applicable present era also.

MANAGEMENT OF BHAGNA

Its treatment can be described under 2 stages:

A. Aushdh chikitsa - According to Madhava Nidana all skeletal injuries are classified basically in 2 types –

Avarna Bhagna

Savarna Bhagna

This classification is important in the management of Bhagna.

Aushdh chikitsa in Avarna Bhagna

- Aalepa¹ – For local applications Sushruta explained manjishthadi lepa contain manjistha, madhuk, rakta chandana, shatdhaut ghrita. This lepa gets absorbed and reduce pain, swelling and promotes bone healing.
According to Sharangdhara rice flour, saindhva salt and amlika fruit pulp make thin paste and applied.
- Poulitice – Sharangdhara told Root of amratak, amlikaphal, shigrupatra, and roots of punarnava, vardhman, kembuka and buttermilk after well cook applied as poulitice.
- Parisheka² –
Nyagrodhadi gana - Paittik prakriti and in summer season.
Panchamula Siddha dugdha – vata pradhan prakriti with pain it is pitta shamak also.
Chakra taila– vata and kapha prakriti mainly in winter Season.
Cold water – Bhavprakash told first for pouring of cold water than applications of Bandaging With help of kush.
Medicated cow milk³ – Milk boiled with madhuradi gana dravyas and mixed with powdered shellac and clarified butter should be given after getting cold Applied as helps quick healing.

Aushadh chikitsa in Savarna Bhagna

- In a case of patient as attended with ulcer on the part, an astringent with plaster fully mixed with honey and clarified butter⁴ should be applied, and the rest (diet and regimen of conduct) should be as laid down in the case of a simple fracture.
- Sneha prayoga⁵ in all types of Bhagna in form of Pan, Nasya. Abhayanga and Anuvasna for vasti and gain power.
- Gandha taila⁶ - Gandha Taila is explained, that it is best for the Asthi - sthirikaran. It can be taken orally and locally in both forms. It's advocated as Ativeeryashali.
- Muscle of wound which are hanging loose are smeared with honey and ghee and pushed into the wound and bandaging done⁷.
- The wound should be dusted with the powder of either lodhra, kaphala, samanga, phalini or panchvalkala added with honey and sukta or with powdered of dhatki and lodhra⁸. It is healing promoter.

Due to development in the science, Science has developed newer things in every aspect but basic principle is same. All things which are accepted today will be more developed tomorrow, the management of fracture relies upon three basic principles Reduction, Immobilization, Rehabilitation. These three principles followed from the time of Acharya Sushruta until today. Many changes have taken place due to availability of new invention.

B. Shastra chikitsa

Asthi Sthapna (Fixation by reduction)

Immobilization of the Bhagna

Rehabilitation Management

1. Asthi Sthapana⁹

Anchhana (Traction) - surgeon should apply traction either side of fragment

Peedna (Manipulation by local pressure) - elevate the depress fragment or depress The Elevate fragment Sankshepa (Opposition and Stabilization) - the far displaced or overlapping fragment Should be try to keep each in close contact by manipulating them separately
Bandhana - (Immobilization with bandage)

2. Immobilization Of Bhagna

An adequate immobilization of the fractured limb is one of the most essential methods in the management. After injury it should be immobilized by following methods according to the site of injury.

Kusha¹⁰ - Acharya Sushruta advocated some important tree barks, Madhuka, Udumbara, Ashwatha, Palash, Kukubh, Bamboo, Sarja and Banyan for the Kusha (Splint) purpose.

Bandhana¹¹ - For fracture, as a very loose bandage does not immobilize the fracture site. Whereas a very tight bandage produce inflammation, pain and suppuration in the Skin due to lack of blood supply. So 'Sadharan Bandha' is the best bandage for Bhagna patient.

After bandage¹² - After bandaging it should be washed with decoction of drugs of Nyogrodhadi gana darvyas boiled with milk along with Vrihutchandamula after getting cold. These are very beneficial in painful condition.

Change of bandage¹³ - Bandage should be applied and changed timely according to the season. In winter once in 7 days, in moderate climate once in 5 days and in summer within 3 days bandage should be changed.

Kapatshayan vidhi¹⁴

In the case of a fracture of the bone, in the leg and in the thigh. The patient should be laid down on a plank or board and bound to five stakes in five different places for the purpose of preventing any movements of his limb, The distribution of the pegs in each case should be as follows, In the first case (fractured leg bone), two on each side of the thigh making four and one on the exterior side of the inguinal region of the affected side. In the second case (fracture of knee joint) two on each side of knee joints making four and one on the back of affected leg. The same short of bed and fastening should be used in cases of fracture and dislocation of the pelvic joint, the spinal column, the chest and the shoulders.

3. Method of mobility exercise¹⁵ (Rehabilitation)

The concept of Rehabilitation in Orthopedics cases probably its first derived from Ayurveda where it is mentioned immediately after removal of a bandage / pop used patients is unable to do routine activities probably due to muscle wasting. In those patients a surgeon should advise to do the lower exercise to higher exercise like in case of hand bone fracture a patient should lift mud ball first for few days followed by salt ball and at last he should lift the heavy object like a stone. This rehabilitation method may be a principle to origin of Physiotherapy.

The duration of rehabilitation also depends on the type of fracture, and associated soft tissue involvement, location of fracture, and method of stabilization. Depending on the stability of fracture, motion exercises may be recommended for adjacent joints, followed by strengthening exercises. Once, the healing is restored completely, the individual can continue with regular activities of daily life.

MANAGEMENT OF FRACTURE OF PERTICULAR PART

Nakhabhagna¹⁶ - In the case of a 'Nail joint', being in anyway crushed or swollen by the accumulation of the deranged blood, the incarcerated blood, should be plastered with a paste of Sali-rice.

Angulibhagna¹⁷ - A finger or phalanx bone out of joint or fractured should be first set in its natural position and but splinted with neighboring finger. Should not take any exercise.

Janghabhagna¹⁸ - In case of 'fracture of tibia - fibula' or femur the affected part should be reduced by traction after applying barks of trees possessing cold properties they should be bandaged with a cloth.

Padatalabhagna¹⁹ - In case of 'Foot fracture' the foot should be gently massaged with ghee, then bandaged with linen and restrict all types of moving activity.

Urubhagna²⁰ - In case of 'Hip joint dislocation' and cracked femur, reduction should be done with the help of traction and rotational movement then splint should be applied and bandage in appropriate manner.

Katibhagna²¹ - In case of 'Iliac fracture' it should be reduced by manipulative procedure including elevation of depressed fragments and depression of elevated fragments followed by bandaging and the patient should then be treated with Snehabasti by medicated oil and ghrita.

Parsukabhagna²² - In case of 'Rib fracture' rib should be lifted up and the fractured rib whether left or right, should be relaxed by being rubbed with clarified butter. Strips of bamboo or cotton pad should be placed over it and the patient should be carefully laid in a tank or cauldron full of oil with the bamboo splint duly tied up with straps of hide.

Talabhagna²³ - In case of 'Fractured bones in the palms of the hands' the two palms should be made even and opposed and then

bandaged together and the affected parts should be sprinkled with raw and Ama tail. The patient should be made later on first to hold a ball of clay and then a piece of salt in his palms for the progressive strengthening of the palm.

Akshakasthi bhagna²⁴ - In the case of 'fractured clavicle' first fomentation should be given to local part and then the depressed fragment should be elevated by a club and the elevated one should be depressed; a tight bandage should then be applied. **Nasabhagna**²⁵ - In case of 'Nasal fracture', when the nose get depressed or curved, it should be straightened by means of a rod; tubes open at both ends should then be introduced in both the nostrils separately and after wrapping up (the nose) with bandage irrigation by ghrita should be carried out.

Kapalbhagna²⁶ - In the case of 'Skull fracture' if the brain matter of the brain is not protruding out in fracture of skull, honey and ghrita should be applied on the part and then bandaged; then ghrita should be given to drink for a week.

Karnabhagna²⁷ - In a case of 'Ear cartilage cut' cleaning of the local part is thoroughly cleaned and skin over the cartilage is sutured separately. Thus in this case just alignment of the teared cartilage and the skin is achieved.

Urdhvabhagna²⁸ - Also the fracture occurring in the upper part of the body should be treated with shirobasti, Karna purna, Ghritapurana and Nasya. The fractures occurring in the lower extremities should be treated with Anuvasna Basti.

Dirghkalabhagna²⁹ - Management of 'Mal united fractures' The union should be again disjoined, and the fractured bone should again be set right and treated as a case of ordinary fracture.

PATHYA-APATHYA³⁰

A fracture patient forego the use of salt, acid, pungent and alkaline substance and must live a life of continence, avoid exposure to the sun and forego physical exercise and purifying articles of food. All vrihna dravya should be given. Madhura, guru, snigdha, kashaya rasa pradhan dravya should be recommended.

A diet containing of boiled shali rice, meat soup, milk, clarified butter, soup of safina pulse and all others nutritive and constructive food and drink, should be given to a fracture patient. In a general rule milk is restricted in Vrana cases but in case of Bhagna it is exceptional.

CONCLUSION

In Ayurveda Acharya Sushruta has elaborate all about Bhagna its types, cause, management, complication. He added some special technique like kapatshayan can compare with intramedullary fixation in modern orthopedics. There is also an Indication of physiotherapy to prevent post fracture stiffness and weakness in adjacent joint and muscle. He also elaborate about herbs, paste, decoction for local application according to doshik involvement and pathya aphyta to provide for favorable condition for better and fast healing without complication. He described about what feature we got after healing. His description about Bhagna shows about his immense knowledge on topic and is much practical in today's era with some modification with same efficacy.

REFERENCES

1. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/7. Page no 27
2. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/12. Page no 28
3. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/13. Page no 28
4. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/14. Page no 28
5. Astanga Hridaya edited with Nirmala Hindi Commentary by Dr Brahmanna Tripathi, Chaukhamba Sanskrit Pratisansthan, Uttar Tantra chapter 27/33. Page no 1090
6. Astanga Hridaya edited with Nirmala Hindi Commentary by Dr Brahmanna Tripathi, Chaukhamba Sanskrit Pratisansthan, Uttar Tantra chapter 27/41. Page no 1091
7. Murthy KRS, Ashtang Sangraha, Vagbhata, Krishnadas academy Varanasi, 2006 chapter 32/31
8. Murthy KRS, Ashtang Sangraha, Vagbhata, Krishnadas academy Varanasi, 2006 chapter 32/33
9. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/17. Page no 28

10. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/6. Page no 27
11. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/9-10. Page no 27
12. Murthy KRS, Ashtang Sangraha, Vagbhatta, Krishnadas academy Varanasi, 2006 chapter 32/26
13. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/8. Page no 27
14. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/48-49. Page no 31
15. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/34-35. Page no 30
16. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/23. Page no 29
17. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/24. Page no 29
18. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/26. Page no 29
19. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/25. Page no 29
20. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/27. Page no 29
21. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/28. Page no 29
22. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/29-30. Page no 29
23. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/34-35. Page no 30
24. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/36. Page no 30
25. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/43-44. Page no 31
26. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/46. Page no 31
27. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/45. Page no 31
28. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/54. Page no 32
29. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/52. Page no 31
30. Susruta Samhita of Ayurveda Tatwa Sandipika hindi commentary by Kaviraja Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi ,reprint 2011, Chikitsa Sthana chapter 3/4-5. Page no 27