

**A REVIEW ON EFFICACY OF *PRIYALA*, *BIBHITAKA* AND *TRIPUSA*
AS *EKALA DRAVYA* IN MANAGEMENT OF *BHAGNA* DUE TO
ASTHIKSHAYA W.S.R TO *SUSHRUTA SAMHITA***

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ABSTRACT

Ayurveda is an ancient “Divine” science of life which deals with two aims: first is preventive one that is to safeguard the health of healthy person and second one is curative way that is to treat disease. In developing world, due to fast and stress full lifestyle, the incidence of accidental injuries is increasing. *Sushruta* under the heading “*Bhagna*” had mentioned detailed diagnosis and management for all orthopaedic injuries. *Bhagna* term of *Ayurveda* covers not only fracture but also a group of clinical entities of musculoskeletal system with traumatic causes. In *Ayurveda*, *Athikshaya* is mentioned as degenerative and geriatric disorder which can be correlated with Osteoporosis. Vitiating *Vata dosha* is mainly responsible for *Asthidhatu Kshaya*. This contributes as one of major reason for *bhagna* along with accidental injuries. In *Bhagna-Chikitsa* chapter, *Sushruta* had mentioned *Tripusa*, *Aksha* (*Bibhitaka*) and *Priyala* as *Bhagna-sandhanaka*. Among this

Tripusa and *Priyala* consists of *madhura rasa-vipaka* and *sheeta virya* while *Bibhitaka* is having *katu-titka rasa*, *madhura vipaka* and *ushna virya*. Thus, here an attempt is made to explain in detail the pharmacodynamic action of these three drugs as *Ekala dravyas* for management of *Bhagna* due to *Asthikshaya* based on *rasapanchaka*.

KEYWORDS: *Bhagna*, Fractures, *Asthi kshaya*, Osteoporosis, *Tripusa*, *Bibhitaka*, *Priyala*.

INTRODUCTION

Ayurveda has explained human body as a homeostasis of *dosha*, *dhatu*, and *mala*. The function of *dhatu* is *Dharana of sharir* (maintaining the structure of body). Among the *dhatu*, *asthi dhantu* is responsible for maintenance of structural frame work of the body. It gives shape to the body and protects the vital organs. Ayurvedic texts has mentioned the *siddantha* of “*ashray-ashrayi sambandha*” of *dhatu* and *dosha*.^[1] According to this *siddantha* *Asthi dhantu* is the *ashray sthana* of *Vata dosha*. *Acharya Sushruta* has explained *Jara-awastha* or *Vrudhakala* as a *Swabhav-balapravruta vyadhi*. In this phase of life *Vata* become dominating in all *doshas*.^[2] This vitiated *Vata* leads to *Sapta dhātu kshaya* including *Astidhatu Kshaya*. *Astikshaya* is explained in 18 types of *Kshaya* by *Acharya Charaka*.^[3] *Asthi kshaya* can be correlate with osteoporosis. In the current era due improper diet and lack of physical activities there is increases risk of *Asthi kshaya* which lead in bone fragility and fracture susceptibility. Also, due to fast and stress full lifestyle, the incidence of accidental injuries is increasing day by day. Thus, there is increase in the orthopaedic injuries.

Sushruta under the heading “*Bhagna*” had mentioned detailed diagnosis and management for all orthopaedic injuries. *Bhagna* term of *Ayurveda* covers not only fracture but also a group of clinical entities of musculoskeletal system with traumatic causes. there are two types of *Bhagna* on the basis of structure involved- *Sandhimukta* (joint dislocation) and *Kandabhagna* (bone fracture).^[4] *Madhukoshvyakhya* has explained two types of *Bhagna* based on clinical manifestations-

- 1) *Savarna Bhagna*- fractures with visible wound on skin
- 2) *Avrana Bhagna*- when bone is fractured but no visible wound is seen on skin.^[5]

The treatment for *bhagna* is of two types: first is basic line of treatment which includes local application like *snehna*, *swedan*, *lepa*, *parisheka* etc and internal use of medication to stabilizes the *dosha* and *asthidhatu*. Specific treatment of *bhagna* is of various types dependent on the *sandhi* and *asthi* involved. Various herbal drugs which do *Vata dosha Shaman* and *Dhatu poshana* can be used as *ekaldravya* for the fractures occurring due to *Asthi kshaya* and also as preventive measure to reduce the *Asthidhatu Kshaya* in elderly persons. In *Bhagna-Chikitsa* chapter, *Sushruta* had mentioned *Tripusa*, *Aksha* (*Bibhitaka*) and *Priyala* as *Bhagna-sandhanaka*.^[6] Among this *Tripusa* and *Priyala* consists of *madhura*

rasa-vipaka and sheeta virya while *Bibhitaka* is having *katu-titka rasa, madhura vipaka and ushna virya*.

AIMS AND OBJECTIVES

- To study the efficacy of *Tripusa, Bibhitaka and Priyala* in management of *Bhagna* due to *Asthikshaya*.
- To study the pharmacological actions of *Tripusa, Bibhitaka and Priyala*.

Table 1: LATIN NAME AND FAMILY.

Sr.No	NAME	LATIN NAME	FAMILY	REFERENCE
1	TRIPUSA	Cucumis sativus Linn.	Cucurbitaceae	<i>Madhura</i> varga
2	BIBHITAKA	Terminalia bellirica Roxb.	Combretaceae	<i>Virechanopaga jwarahara</i>
3	PRIYALA	Buchananina latifolia syn.	Anacardiaceae	<i>Kashayaskanda Nyagrodhadi</i> varga

Table 2: RASA-PANCHAK.^[7]

NAME	RASA	VIRYA	VIPAKA	GUNA	DOSHAGHATA
TRIPUSA	<i>Madhura</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Laghu, ruksha</i>	<i>Kapha-pitta hara</i>
BIBHITAKA	<i>Katu-tikta</i>	<i>Ushna</i>	<i>Madhura</i>	<i>Laghu, ruksha</i>	<i>Kapha-pitta hara</i>
PRIYALA	<i>Madhura</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Shingdha, guru & sara</i>	<i>Vata-pitta hara</i>

MODE OF ACTION

1. TRIPUSA

It consists *Madhura rasa-vipaka* due to which it has property of *Vata* shaman and do the *bruhana* karma and reduces *Asthi dhatu* kshaya. The fruit is said to be *vata-nashaka* according to Bhavprakash. It has *Sothahara* property, which help to reduce swelling and associated pain in fracture (*bhagna*). The *Laghu and ruksha guna* help in *bhagna-varna* sodhan and *kleda* and *puyu(pus)* soshana. According to modern *tripusa* has rich amount of vitamin K which help in calcium absorption by bones thus reducing osteoporosis (*Asthikshaya*) and make bones strong and less prone to *bhagna*.^[8]

2. BIBHITAKA

Bibhitaka phala majja (fruit pulp) is *vata dosha* nashak thus reduce the *Asthikshaya*. It has *Rasayana* and *Balya* properties due to which it does the *poshana and vardhana of dhatu* along with *asthidhatu* and helps to reduce the *Asthikshaya*. Though, it consists of *ushna virya* it is *sheeta* in *sapra* due to which it possesses the *daha-nashak* property due to which it is used for *lepan*. It has *Vedanasthapana* and *Sothahara* property due to which it is helpful to

reduce the pain and swelling in fracture. The fibres present in the fruit consist of oil which is said to be Keshya i.e it gives nourishment to hairs. *Kesha* is said to be *Mala to Asthidhatu* according to *Ayurveda*. Thus, it ultimately does proper *poshana and vardhana of asthidhatu* thus help in fracture healing.

3. PRIYALA

Its fruit pulp is said to be *vata dosha nashaka*. *Sushruta* has mentioned *Priyala* in *Nyagrodhadi varga*. The drugs of this *varga* consists of *varnya, sangrahi* and *bhagnashandan* properties. Thus, it is useful in management of *bhagna*. It is said to be *balya* and *bruhaniya* thus helps in nourishment of *Asthidhatu* and reduces the *Asthi dhatu kshaya*.

CONCLUSION

Asthikshaya is multifactorial disorder characterised by reduced bone mass and oestoporotic fractures. It needs a holistic approach for treatment of *Asthikshaya* and related *bhagna*. The drugs mentioned above works both on fracture healing and reducing *kshaya* of *Asthi dhatu* by its *rasa* and *vipaka* and *balya bruhana karma* along with *varnya, Sothahara, dahashamak, vedanasthapaka* properties. These drugs are easily available, simple for administration and can be used as *ekala dravya* also. Further clinical studies can be planned to established their role in the management of *bhagna* related to *Asthikshaya-janya samprapti*.

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