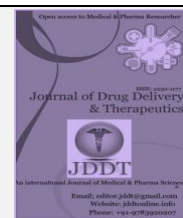
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Review Article

Physiological Perspectives of *Ashti Dhatu* and Role of *Basti Chikitsa* towards the Health Restoration of *Ashti Dhatu*

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ABSTRACT

Asthi is one of the important *Dhatu* amongst the many other *Dhatu*s of body which mainly involve in *Sharira dharana* function, it provide shape and physical built up of body and protect internal organs from external shock. The equilibrium of *Asthi dhatu*s helps to restore normal health status while disturbed functioning of *Asthi dhatu*s leads pathological states. The disturbance in *Asthi dhatu*s may be *Vridhhi* or *Kshaya* that further leads many other bone disorders. The ayurveda described various approaches to restore physiological health of *Asthi dhatu*s and *Basti chikitsa* is one of them. Considering thus present article summarizes physiological aspects of *Asthi dhatu*s and role of *Basti chikitsa* towards the management of pathological disturbances related to the *Asthi dhatu*s.

Keywords: *Ayurveda, Asthi dhatu, Basti chikitsa, Physiology*

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Introduction

Ayurveda is considered as one of the primary health science of ancient India. The major approaches of ayurveda help to establish health and longevity. The balancing state of *Doshas, Dhatu & Agni* provides normal health status and keep person away from diseases. The normal functioning of *Dhatu*s constitutes biological units of body and maintains physiological regulations of vital organs¹⁻⁴. Ayurveda described seven *Dhatu*s and *Asthi dhatu* is one of them. Ayurveda mentioned that the general structure of *Asthi dhatu* remains unchanged during life span since it is predominate with *Prithvi Mahabhoot* which imparts stability. *Asthi* is considered as place of air; *Vata dosha*. When *Vata* increase there may be decrease in quality of *Asthi*. Therefore maintaining *Vata dosha* is considered as prime approach for the management of irregularities related to *Asthi dhatu*. Further, *Bastichikitsa* is best when management of *Vata dosha* is intended²⁻⁵.

Physiological role of *Asthi dhatu*

- ✚ *Dharana* is the main function of *Asthi dhatu* that gives shape to the body and maintain structural framework.
- ✚ *Asthi dhatu* protects organs of body from external shock.

- ✚ *Avalamban* (maintain erect posture of body).
- ✚ *Nibandhan* (provide strength and stability to *Mamsa* and *Sira*).
- ✚ *Asthi dhatu* support *Majja Dhatu*.
- ✚ *Mala poshana* is another function of *Asthi dhatu*.
- ✚ Physical strength and compactness of body supported by *Asthi dhatu*
- ✚ *Asthi dhatu* connects tissues and establishes co-ordination for various physiological activities including movement.

Abnormalities related to *Asthi dhatu*

Asthi Daurbalya, Asthi Saushirya, Pratatm Vata Roga, Asthi Nistoda and *Timir Darshnam*, etc. are some major abnormalities related to *Asthi dhatu*.

➤ *Asthi vridhhi lakshana*

Adhyasthi means extra growth of bone which may leads other complications such as; Acromegaly in which abnormal growth of hands, feet and jaw occurred. Paget's disease is another condition related to excessive growth of bone in which bone enlargement occurs particularly to pelvis, spine

and skull area. Melorheostosis is other similar types of condition which involves thickening of cortical bone⁴⁻⁷.

➤ **Asthi kshaya lakshana**

Asthi kshaya means decrease in quality of *Asthi dhatu* which resembles condition of osteoporosis as per modern science.

The symptoms of such condition may involve joint pain, vertigo, lightness in bones, fatigue and lethargy, etc. **Figure 1** depicted some manifestations related to the abnormalities in *Asthi dhatu*

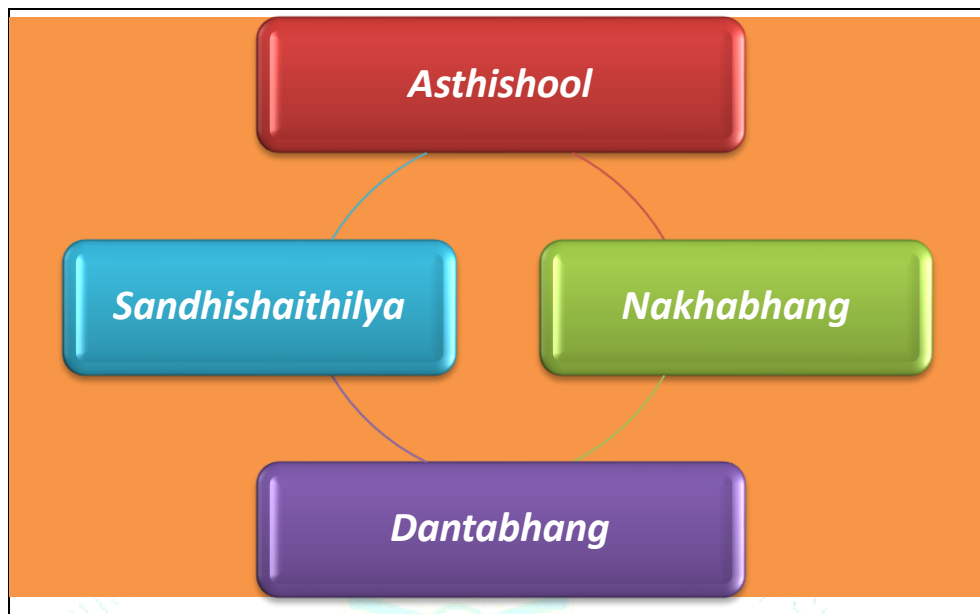


Figure 1: Some manifestations related to the abnormalities in *Asthi dhatu*

Causes for Abnormalities in *Asthi dhatu*:

- Aging
- Physical stress
- Malnutrition
- Degeneration of bone tissue in diseases condition
- Surgical trauma and injury
- Environmental effects
- *Ahara-Viahar* that vitiate *Vata*

Role of *Basti karma*

Ayurveda mentioned various approaches to restore health status of *Asthi dhatu* including *Basti karma* which offers following beneficial effects:

- ✚ *Majja gata vikaras* can be treated effectively with the help of *Kala basti* and *Karma Basti*.
- ✚ *Basti karma* regulates function of *Vata* thus maintain physiology of bone.
- ✚ *Basti* pacify vitiated *Doshas* and enhances nutritional supply.
- ✚ *Basti* imparts direct effect on *Asthi* and *Majja Dhatu* and facilitate functions of channels that supply to bone tissues.
- ✚ *Sukshma Guna* of *Basti* drugs reaches up to micro circulation and enhances nutritional supply to all parts.
- ✚ *Thikshna Guna* of ingredients used for *Basti karma* break aggravated *Mala* and *Dosha* thereby facilitate their evacuation from body.

✚ *Snigdha Guna* of *Basti Dravyas* liquefies vitiated *Doshas* and removes blockage of channels.

✚ *Sneha* of *Basti* increases permeability thus balances process of exchange and diffusion thus improves nourishment of bone and other tissue.

✚ *Utkleshana* or *Samana* effects of *Basti* pacify *Dushya* of *Srothas* thus acts on initial stage and perform function of *Samprapti Vighatana* of *Asthi pradoshaj vikara*.

✚ *Basti* helps to maintain integrity of peripheral nerve and prevents process of degeneration thus reduces loss of integrity of bone tissue.

✚ *Basti* promote normal bacterial flora of body require for process of digestion and assimilation thus boost regeneration of tissues.

✚ *Basti* enhances process of absorption, imparts neural activation and causes mechanical stimulation therefore helps in degenerative disorders.

✚ *Basti* relieve *Vata* thus helps in symptoms such as; pain, stiffness and tenderness⁵⁻¹⁰.

Conclusion

Asthi is vital *Dhatu*s of body provides shape and physical integrity to the body. *Asthi* protects organs of body from external shock, maintain posture of body, provide strength and stability, support *Majja Dhatu*, imparts compactness of body, *Asthi dhatu* connects tissues and regulates functions of movement. The abnormal state of *Asthi dhatu*s may be considered as *Vridhhi* or *Kshaya*. Ayurveda described various approaches to restore *Asthi dhatu*s and *Basti chikitsa* is one such approach. *Basti karma* regulates normal state of *Vata*, pacify vitiated *Doshas*, enhances nutritional supply, facilitate

functions of channels supplying to bony tissues, helps in *Samprapti Vighatana* of *Asthi pradoshaj vikara*, *Basti* prevents process of degeneration and boost regeneration of tissues thus strengthen physiological functioning of *Asthi dhatu*.

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