

A CASE STUDY ABOUT THE EFFECT OF PANCHATIKTA KSHEERA BASTI IN THE MANAGEMENT OF ASTHIKSHAYA

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ABSTRACT

Ayurvedic description of *Asthikshaya* closely resembles with osteoporosis of modern science. A male patient aged 55 years was admitted in IPD of *Panchakarma* with complaints of bilateral knee joint pain, swelling, stiffness, restricted movements, general weakness since 6 months. It was a diagnosed case of Osteoporosis. Osteoporosis is a skeletal disease characterized by low bone mass and micro architectural deterioration of bone tissue, with a consequent increase in bone fragility and susceptibility to fracture. Modern medicines have its own limitations in treating osteoarthritis and have many adverse effects with its prolonged use. Now is the period of joint replacement surgery,

but due to some underlying systemic illness, financial burden it is not possible for all patients to go for surgical interventions. Hence *Ayurveda* which is well known for treating chronic diseases and providing a safe therapy having no side effect, is proved a noble management for treating Osteoporosis. In this study *Panchatikta Ksheera Basti* was selected for the management of Osteoporosis. *Basti Chikitsa* is considered as half the treatment for *Vata* dominated diseases. As *Basti* is known for its *Vata Shamaka* properties, proved better in the management of osteoporosis (*Asthikshaya*). *Panchatikta Ksheer Basti* had shown marked improvement in all parameters i.e. pain and swelling was reduced, stiffness reduced, gait improved, range of movements increased.

KEYWORDS: Asthikshaya, Osteoarthritis, Panchatikta Ksheer Basti, Vata.

INTRODUCTION

Osteoporosis is a growing public health problem globally and is a leading cause of pain and disability in most countries worldwide. It is the second most common rheumatic disease

having prevalence of 22-39% in India. OA is more common in women than men, but the prevalence increases dramatically with age.^[1] Osteoporosis is a skeletal disease characterized by low bone mass and micro architectural deterioration of bone tissue, with a consequent increase in bone fragility and susceptibility to fracture.^[2] Osteoporosis, a chronic, progressive disease of multifactorial etiology and is the most common metabolic bone disease. It is also known as degenerative arthritis, which commonly affects the hands, feet, spine and large weight bearing joints such as the hips and knees. It is increasingly being recognized that multiple pathogenic mechanisms interact in the development of the osteoporotic state.

Osteoporosis can be caused both by a failure to build bone and reach peak bone mass as a young adult and by bone loss later in life. Accelerated bone loss can be affected by hormonal status, as occurs in postmenopausal women; can impact elderly men and women; and can be secondary to various disease states and medications. Estrogen deficiency not only accelerates bone loss in postmenopausal women but also plays a role in bone loss in men. Estrogen deficiency can lead to excessive bone resorption accompanied by inadequate bone formation. Calcium, vitamin D and PTH help maintain bone homeostasis. Insufficient dietary calcium or impaired intestinal absorption of calcium due to aging or disease can lead to secondary hyperparathyroidism. PTH is secreted in response to low serum calcium levels. It increases calcium resorption from bone, decreases renal calcium excretion, and increases renal production of 1,25-dihydroxyvitamin D (1,25[OH]₂D)-an active hormonal form of vitamin D that optimizes calcium and phosphorus absorption, inhibits PTH synthesis, and plays a minor role in bone resorption.

Osteoporosis has been classified as primary or secondary. Primary osteoporosis has been further divided into type I and type II. Type I osteoporosis is six times as common in women as in men. It is called as postmenopausal osteoporosis because in menopause, estrogen deficiency takes place because of loss of ovarian follicles. Estrogen protects cartilage from inflammation and supports osteoblastic formation. Type II osteoporosis or age associated osteoporosis, is twice as common in women as in men. A long history of calcium deficiency is largely responsible for this condition, which is called senile osteoporosis because it occurs in patients over the age of 70. Most of the old age population usually suffers from this disease which hampers quality of life. To give effective relief to the patient, Ayurvedic science is a boon for such cases through Shodhana and Shamana formulations. Panchatikta Ksheera Basti

is among such preparations. In this study, we will found the incredible effect of *Basti* in osteoarthritis.

MATERIAL AND METHODS

Single case study.

Clinical Intervention

A male patient aged 55 years was admitted in IPD of Panchakarma with complaints of bilateral knee joint pain, swelling, stiffness, restricted movements. It was a diagnosed case of Osteoporosis.

Associated Symptoms

General weakness, loss of appetite, Constipation.

History of present illness

Patient was well before 6 months. Then he gradually developed pain and difficulty in walking and sitting. Then he went to a nearby allopathic hospital and took allopathic treatment for more than 3 months but couldn't get satisfactory result. Then he came to our hospital and got admitted for better treatment.

Family History

Not Significant.

General Examination:

Pulse : 78/min
Blood Pressure : 122/86 mm of Hg
Pallor : +
Icterus : -ve
Clubbing : -ve
Cyanosis : -ve

Systemic Examination

N.A.D.

Cardiovascular System

N.A.D.

Respiratory System

N.A.D.

Per Abdomen

N.A.D.

Subjective criteria

1. Pain
2. Tenderness
3. Weakness
4. Restricted movements

Objective criteria

BMD Value (T Score): Patient's BMD value was -2.8 (Osteoporosis: T Score less than or equal to -2.5).

AYURVEDIC VIEW

Osteoporosis may be probably correlated with Asthi Kshaya in Ayurveda which also involves loss of Asthi Dhatu (bony tissue). Vata Vriddhi is the main causative factor for Asthi Kshaya. Kshaya means loss, decline, decay, diminution or waning. Dalhana has aptly defined Kshaya as 'Swapramanhaani'^[3], whereas Chakrapani describes it as Rahasaha or Nyuntvam.^[4] Common symptoms of Asthi Kshaya involves Asthi Shoola, Shrama, Kesha, Nakha, Loma and Danta Vikara, Sandhi Shaithilya, Rukshata, Dourbalya, Sparshashatwa etc which are resembling with the symptoms of Osteoporosis like bone pain, tenderness and weakness etc. Among the Dhatus, Asthi is blessed with the function of Shareera Dharana^[5] Asthi Kshaya is a condition in which there is Kshaya (diminution) of Asthi Dhatu (bone tissue). According to the principal of Ashrayashrayee Bhava^[6], when Vata increases, Asthi Dhatu decrease because Vata and Asthi are inversely proportional to each other. With advancing age, Vata Dosha in the body increases and Kapha Dosha (specially Sleshmaka Kapha) decreases. Sandhis are the main site of Sleshmak Kapha. Hence joints becomes less functional as vitiated Vata gets lodged in the joints.^[7]

Treatment

1. *Basti Karma*

In this study Panchatikta Ksheer Basti was selected for the management of Osteoporosis. As Basti is known for its Vata Shamaka properties, so it was assumed that it will be proved better in the management of Asthi Kshaya, both in subjective and objective parameters. Basti was planned in Kala Basti pattern.i.e. 10 Niruh Basti with Panchatikta Ksheer Kwath and Matra Basti with Balaswagandhadi Taila.

Contents of *Panchatikta Ksheer Basti*

Milk processed with Panchatikta Dravya- 2 Prsruta

[Patola, Nimba, Vasa, Kantakari,Guduchi]

DashmoolTaila – 1 Prsruta

Makshika- 1 Prsruta

Saindhav Lavana – 1 Aksha

Shatpushpa Kalka -1 Karsha

Total Quantity- 4 Prsruta (app. 400 ml).

2. *Shamana Chikitsa*

A) Ashwagandha Churna-3gm, GokshurChurna-2gm, Chopchini-500mg-two times/day with milk

B) Ajamodadi Churna-3gm, Sankha Bhasma -500mg, twice/day with warm water before meal

C) Dashmmol Kwath 20ml two times before meal

D) Yograj Guggulu 2 tab three times, with luke warm water after meal

E) Panchasakar Churna 5gm at bed time.

OBSERVATION

In this study Panchatikta Ksheer Basti was selected for the management of Osteoporosis. As Basti is known for its Vata Shamaka properties, proved better in the management of osteoporosis (AsthiKshaya). Panchatikta Ksheer Basti had shown marked improvement in all sign and symptoms i.e. pain and swelling was reduced, Stiffness reduced, Gait Improved, range of movements increased.

DISCUSSION

Panchatikta Ksheer Basti is indicated in Asthi Pradoshaja Vikaras^[8] and have a bifold nature i.e it provides sufficient nourishment to the Asthi Dhatu as well as check the Vata Dosha also. Acc. to Arunadatta, the combination of Snigdha and Shoshana property produces Khara Guna which is also the property of Asthi, hence nourishes the Asthi Dhatu as per the Samanya Siddhanta. The decoction made in Ksheer which is having Madhoo and Snigdha Guna, pacify Vata and Pita Dosha and act as Brimhana and due to Sukshma Guna of Sandhava Lavana it reaches upto micro channels of the body^[9] Also due to similar composition of ingredients of Basti and Asthi, Basti will reach the Asthivaha Srotas and will be acted upon by Parthivagni, Vayavagni, and Tejasagni and gets transformed into Asthi Poshakamshas on which the Asthi Dhatwagni will act upon and converts it into Sthayi Asthi Dhatu. Maximum effect of Basti is on Pakwashya which is Purishdhara Kala. Acc. to Dalhana Purishdhara Kala is nothing but Asthidhara Kala^[10] and there is a definite relation between these two Kalas. So it is observed that after giving Ksheera Basti in Pakwashya there is relief in symptoms like pain and tenderness etc. Phytoestrogens molecule (derived from Tikta Rasa Pradhana plants and from dairy products) having estrogenic actions- decrease osteoclastic activity, increase bone matrix formation and mineral deposition and thus helps in preventing osteoporosis. Many bone and joint disorder are arising due to deficiency of calcium due to which bone density decreases and degeneration of bones occurs. As milk is good source of calcium and other minerals so, by giving Ksheera Basti calcium level improved in the body and bony tissue are repaired.

Only 20% – 30% of calcium is absorbed from our dietary food and remains excreted in stool. Maximum calcium absorption occurs in jejunum and ileum but some of the calcium is also absorbed from colon also. Hence as Basti Dravya reaches to colon and calcium absorption occur there; it provide more calcium to bone. Chief protein in milk are caseinogen and lactalbumin. Caseinogen is a phosphoprotein and is associated with calcium as calcium caseinogen so milk is a good source of calcium. Also the carbohydrate of milk is lactose which is useful for absorption of calcium, hence provides nutrition to *Asthi Dhatu* and helps in curing Osteoporosis.

CONCLUSION

Panchatikta Ksheera Basti is found very effective in reducing pain and other symptoms of Asthi Kshaya with special reference to osteoporosis like tenderness, restricted movements, weakness etc.

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