



ROLE OF PANCHAKARMA IN ASTHIMAJJAGATA VATA (OSTEOPOROSIS) - A CASE STUDY

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ABSTRACT

Vata plays major role in manifestation of any disease. Vata nanatmaja vyadhi are 80 in number. Separate chapters are dedicated to vatavyadhi and its chikitsa in classics. Among them asthimajjagata vata is one disease. Cause of vatavyadhi either dhatu kshaya or maragavarana. In asthimajjagata vata (osteoporosis) Dhatu kshaya is the main cause. This condition is correlated to osteoporosis. Causes of osteoporosis may be primary or secondary leading to decrease in bone density, fragile bones and bone fracture. Phosphorus (Biphosphonate), calcium and dietary supplements are some line of treatment mentioned in cotemporary science. This paper puts lights on a case of asthimajjagata vata (osteoporosis) and tries to explain the role panchakarma treatment modalities such as pancha tikta ksheera basti, sarvanga abhyanga and shastika shali pinda sweda.

INTRODUCTION

Asthimajja gata vata is a gambheera dhatu gata vata vaydhi explained in classics. All vatavyadhi is manifested due to these 3 main nidana. Nidana for vata prakopa are Aharaja, Viharaja and Manasaja Nidana, dhatukshya (apatarpana janya), margavarana. Atipravarti and Sthanasamshraya of Dosha leading to Dosha Dushya Sammurchhana in the AsthiMajja, gives rise to a Sthanika KaphaKshaya and Vata Vriddhi. Vatavriddhi leads to asthi-Majja Kshaya.^[1] Chief Symptoms of asthi and majja kshaya are Asthi Saushirya, Asthi Daurbalya, Asthi Laghuta, Asthi Nistoda, Pratam Vata Roga, AlapShukrata, Bhrama, Timira Darshnam.

Asthi and majja are uttarottara dhatu and Imbalance in Asthi Dhatvagni leads to improper formation of Sthayi Asthi Dhatu from Poshaka Asthi Dhatu, & improper Majja formation.^[2] There is unique relationship between asthi, majja and vata Dosha.

The following signs and symptoms are seen in asthimajjagata vata^[3] as per classics – Asthi bheda (splitting pain in the bones), Parva bheda (splitting pain in the inter-phalangeal joints), Sandhi shula (pain in the joints), Mamsa kshaya (emaciation of muscles), Bala kshaya (deterioration of strength), Aswapna (sleeplessness), Santataa ruk (constant pain exhibited).

The symptoms of Majja Kshaya can be correlated to contemporary science and symptoms are pain in joints, seeing dark in day light, vertigo, hollowness and lightness in bones and oligospermia etc. Asthi Saushirya, Asthi Daurbalani, Asthi Laghuni, Asthi Shirnta, all these symptoms shows resemblance with osteoporosis. Asthi Kshaya is decrease in the bone tissue and Asthi Saushirya means „porous bones“. Hemadri as commented on the word „Saushirya“ as „Sarandhratvam“ which means „with pores“. These symptoms are explained in the context of Majja Kshaya.

The word “osteoporosis” is from the Greek terms for “porous bones”. “Systemic skeletal disease characterized by low bone mass micro-architectural deterioration of bone tissue, leading to enhanced bone fragility and a consequent increase in fracture risk” (bone with lower density and higher fracture risk). WHO: Utilizes bone mineral density as definition (T score <-2.5) surrogate marker. In India it has been presumed that 35% of post menopausal women are at the risk of developing osteoporosis. 15% chance of hip fracture in lifetime of post menopausal women.

Osteoporosis classified as: Primary - Juvenile osteoporosis -8-14yrs, abrupt bone pain or a fracture; Idiopathic osteoporosis- i.post- menopausal, (estrogen def.) ii. Senile or age related (in men and women as BMD declines). Secondary – Congenital, Hypo-gonadal

states, Endocrine disorders, Deficiency states, inflammatory diseases, Hematologic & Neo-plastic disorders, Medications.

Osteoporosis generally does not become clinically apparent until a fracture occurs. The clinical features seen may be Pain is localized to a specific, identifiable, vertebral level in the mid thoracic to lower thoracic or upper lumbar spine. The pain is described variably as sharp, nagging or dull; movement may exacerbate pain.^[4] Contemporary science deals with these diseases with steroids, calcium and phosphorous supplements.

In Ayurveda the concept of asthimajagata vata and its chikitsa is explained by acharyas. this condition can be affectively treated with asthi poshaka, brimhana line of treatment.

BRIEF HISTORY

Case report: A 33 year old female patient K/C/O depression since 7 years, came with chief complaints of Generalized body ache, pain in all joints and low back ache since 5-6 years. She also had Reduced appetite since 5-6 years. loss of interest in doing work since 6 years. Headache on and off since 6 years. loss of sleep since 6-7 years.

Past history

H/O repeated UTI- profuse vaginal discharge - 6 years back; for which she underwent surgery (total abdominal hysterectomy) 5 years back.

Personal history

Appetite was reduced since 5 to 6 years (since 14 years patient was taking alpa ahara (less quantity of food) even though appetite was normal).Bowel was irregular; hard stools were passed. She had habit of drinking Coffee/tea 4-5 times a day. Total duration of sleep was 2-3 hours with intermittent awakening since 5 -6 years. working as labourer – (long term standing, heavy weight lifting, long term sitting).

Medical history: Patient was on anti-depressive drugs and got significant relief.

Shareera prakruti of the patient was vata- pittaja, had krura kosta (on the basis of bowel habits), alpa bala (minimum physical strength) with avara satwa (poor psychological strength); she also had mandagni (reduced appetite and power of digestion). For these complaints patient got admitted in this hospital for further management.

ASSESSMENT CRITERIA

Pain, stiffness, visual analogue scale (VAS) and improvement in the movements of flexion and extension were assessed at the time of admission, after 1st week of treatment and after 2nd week of treatment.

Pain	
No pain	0
Mild pain with restriction of movement	1
Moderate pain with restriction of movement	2
Severe pain with restricting movements	3
Visual analogue scale	
No pain(0)	0
Mild(1-3)	1
Moderate(4-6)	2
Severe (7-10)	3
Stiffness	
No stiffness	0
Stiffness of mild grade, need no intervention	1
Stiffness relieved by topical medicaments	2
Stiffness relieved by oral medication	3
Stiffness not responded by any medicine	4

Investigations

X-ray findings: lumbar spine- decreased cortical bone, wedge shaped vertebrae, osteophytes Abdominal- pelvic sonography (12/11/2018) Uterus-not visualized post operative status; Impression: No abnormalities detected (Post hysterectomy status).

NIDANA PANCHAKA

Nidana -Anashana, Alpashana, Katu, Kashayarasa pradhana ahara Atisevana, Ati Shrama, Vega Dharana,

Ati-Chinta & Shoka Purva roopa- Anga marda, Anna dwesha, Nidranaasha, Sandhi shoola, Santata ruk in Shareera and Sandhi were observed in milder form.

Roopa- Sandhi shoola, Santata ruk in Shareera and Sandhi, Anga marda, Anna dwesha, Nidranaasha Upashaya- nothing specific

SAMPRAPTI



CHIKITSA SOOTRA

- बाह्याभ्यन्तरतः स्नेहैरस्थिमज्जगतं जयेत्^[6]
- अस्थ्याश्रयाणां व्याधीनां पञ्चकर्माणि भेषजम्
बस्त्यः क्षीरसर्पीषि तिक्तकोपहितानि च^[7]

- वातस्योनक्रमः स्नेहः स्वेदः संशोधनं मद्दु।
..रसतैरानुवासनं^[8]

TREATMENT GIVEN

Treatment given	Duration of treatment
deepana pachana dravyas- panchakola choorna	2 weeks – from 3/2/21 to 16/2/21
sarvanga abhyanga with ksheera bala taila	1 week – from 3/2/21 to 9/2/21
shastika shali panda sweda	1 week – from 3/2/21 to 9/2/21
pancha tikta ksheera basti	week –from 10/2/21 to 16/2/21

1. Panchakola Choorna

It is going to act as agni deepaka and pachaka; in turn good agni bala helps in dhatu parinamana. Good agni bala and dhatu parinama are directly proportional as per acharya.

2. Ksheera Bala Taila

Ksheera bala taila has been described under vatarogadhikara. It has the properties of agnideepana, vata shamana and brimhana.

3. Shastika Shali Pinda Sweda

Shastika shali is is balya, brimhana and used in mamsa bala kshaya condition.

Bala moola acts as vatahara, balya.

Ksheera acts as vehicle to transport nutrients to body tissues. Milk contains phospholipids and our body tissue cells are composed of lipid layer. Because of this there will be samanya guna vridhhiPanchatikta ksheera basti.

4. Tikta Ksheera Basti

Tikta rasa dravyas have direct affinity towards asthi dhatu; as Atisevana of tikta rasa dravyas leads to asthi kshaya. Tikta dravyas are used along with ksheera and gritha. Ksheera has madhura and snigdha properties

which helps to control vata dosha and acts as Brumhana. Ksheera supplies calcium and phosphorus required for the bone formation. Ghrita is vata pitta shamaka, balya, agnivardhaka and sheeta veerya.

Changes observed in pain, stiffness and walking after treatment.

Complaints	BT		After sarvanga abhyanga and shastika shali panda sweda (1 st week)		After panchatikta ksheera basti (2 nd week)	
	Rt	Lt	Rt	Lt	Rt	Lt
Knee Joint	Rt	Lt	Rt	Lt	Rt	Lt
Pain	2	2	2	1	0	0
Shoulder joint	Rt	Lt	Rt	Lt	Rt	Lt
Pain	0	3	0	2	0	1
Swelling	0	2	0	2	0	1
Redness	0	3	0	3	0	2

Changes observed in range of knee joint and shoulder joint movements.

Observation	At admission		1 st wk		2 nd wk	
	Rt	Lt	Rt	Lt	rt	Lt
Knee joint	Rt	Lt	Rt	Lt	rt	Lt
Flexion	130	130	130	140	140	140
Extension	20	20	10	10	0	0
Shoulder joint	Rt	Lt	Rt	Lt	rt	Lt
Flexion	45	20	45	20	0	45
Extension	170	150	170	150	170	160

After 2 weeks of treatment patient was discharged and advised for follow up for minimum of 2 months.

SHAMANA AUSHADHI

1. vatavidhwamsa rasa 1-0-1 for 1 month
2. shatavari lehya Itsf-0- Itsf with ksheera for 2 months

DISCUSSION

Diseases due to Gata Vata involving gambheera dhatu (deeper) are chronic in nature and takes longer duration for healing. Rasa-rakta-mamsa are considered as uttana dhatu. Meda-mamsa-asthi-majja-shukra are considered as gambheera dhatu. These Gambheera dhatus are also marma sthana and the disease pertaining to these Gambheera Dhatus are krichrasadhya or asadhya sometimes.

The present case of Asthimjagata vata is specifically due to dhatukshayaja nidana sevana as per Ayurveda. Considering point of view of contemporary science optimum level of estrogen hormone is required for bone mineral density. As the subject underwent total abdominal surgery, there will be sudden drop in estrogen. Loss of ovarian estrogens are associated with declines in bone mineral density.

Normal process of rasa to shukra dhatu parinamana takes 1week - 1 month duration according to Vagbhata. Dhatu parinamana also depends on the agni bala of the subject. According to these views asthi and majja dhatu formation will take longer duration and requires longer duration of intervention.

Considering basic concept of dhatu parinama, nidana parivarjana; treatment should be adopted. Vata vidhwamsa rasa advised to control vata dosha. Shatavari rasayana helps to regulate pitta dosha (metabolism), inturn regulates hormone levels in the body; as the patient was known case of depression shatavari also helps in calming the mind, reduces stress. Along with medicines it is very important to take Pathya ahara; mainly brimhana and dhatu pustikara.

PATHYA – APATHYA

- 1) Nidana Parivarjana
- 2) Ahara- Snigdha, Madhur, Guru Anna Sevana- Ksheera, Mamsarasa, Gritha
- 3) Vihara- Ratraujagarana Varjya, Divaswapna, Bharaharana.

CONCLUSION

Asthimjagata vata as it is gambheera dhatugata vikara and is asadhya. If the condition is chirasamutthitha it is sadhya. In this case it is akalaja asthi dhatu sushirya and has irreversible changes like post hysterectomy status; which is very important for a women in regulating circulating ovarian estrogen. Repeated treatment, shamana aushadhi and Pathya ahara vihara will delay the risk occurring due to osteoporosis.

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