



ROLE OF PANCHAKARMA IN THE MANAGEMENT OF OSTEO ARTHRITIS OF KNEE JOINT-A CASE REPORT

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ABSTRACT Osteoarthritis is predominantly a disease of the elderly but no age is exempt. OA is the most common form of arthritis. It is caused mainly by wear and tear of the joints and is major cause of pain and disability in elder people. Prevalence of OA rises progressively with age and it has been estimated that 45% of all people develop knee OA at some point during life. According to Ayurveda Sandhivata can be correlated with Osteoarthritis, which is characterised by vedana during prasarana and akunjana with vata purna druti sparsha. A 64-year old female patient came to OPD with complains of severe pain in knee joint and restricted movement for 1 and 1/2 years with X-ray reports which showed "grade 4" OA changes. Patient was treated with janupichu with masha tailam for 7 days, upanaha and matravasti for 14 days. Remarkable changes were observed in both subjective and objective parameters at the end of treatment.

KEYWORDS : Sandhigata vata, Osteoarthritis, upanaha, mathravasti, panchakarma

INTRODUCTION

Osteoarthritis is an abnormality of synovial joints characterized by softening, splitting and fragmentation of articular cartilage¹. This is usually accompanied by subchondral sclerosis, bone cysts, joint space narrowing and bony overgrowth. Among all the chronic rheumatic disease hip and knee OA is the most prevalent. Overall prevalence of knee OA was found to be 28.7% and generally females are more susceptible than Male with ratio of 1.3:1.2. Age is a major risk factor of OA. Prevalence is found to be highest in the age group of 60 years.

Osteoarthritis can be correlated with sandhigata vata in Ayurveda. Sandhigata vata is described under the wide spectrum of vatavyadhi. The dhatukshayakara ahara vihara leads to vitiation of vata, which circulate through the srotas and get dislodged in sandhis (joint), the rooksha guna of vata which causes dryness of shleshaka kapha (synovial fluid) and kshaya of Asthi dhatu ultimately leads to sandhigata vata. Main symptoms are shoola (Pain), shopha (swelling), vata poorna dhriti sparsha (crepitus), painful prasarana and akunchana (painful flexion and extension), sandhi hanti (Restriction of joint movements), Atopa (crepitus)³. For the alleviation of rookshaguna, snehana is the suitable modality of treatment. Acharya Vagbhata has mentioned treatment for sandhigata vata as snehana, dahan karma, Upanaha and abhyanga⁴. Janupichu and mathravasthi with mahamasha taila, upanaha with vatahara dravyas were used for the management of the present case.

CASE REPORT:

A 64-year old obese female patient came to OPD of PANCHAKARMA DEPARTMENT with complains of severe pain in both knee joints (Right > left), restricted range of movement with morning stiffness for 1 and half years.

Patient was apparently asymptomatic 1 and half year back, then she developed dull, non-specific pain in right knee joint which was insidious in onset but she neglected it. After one month while climbing a hill suddenly she got severe pain in both knee joints and unable to move further. Next day she consulted an allopathic physician and advised to take an X-ray. From there it is diagnosed as osteoarthritis with Grade 4. And they prescribed analgesics for 6 months but did not obtain satisfactory result with that. The Pain was gradually progressive, more in morning hours along with stiffness which was relieved on activity. patient was unable to flex her knee to use Indian toilet and range of ambulation was decreased. Pain was found to be

aggravated on walking and climbing steps. Then she came to DR. BRKR GOVT. AYURVEDA HOSPITAL, for further treatment.

PAST HISTORY: No specific past history, no history of trauma.

GENERAL HISTORY:

WEIGHT: 72 kg

HEIGHT: 160 cm

SUBJECTIVE PARAMETERS

Table no-1 : Showing grading of subjective parameter

Sandhi shola (pain in joints)	
No pain	0
Pain during excessive movement	1
Pain during little movement	2
Pain during rest but tolerable	3
Continuous Pain not tolerable	4
Sandhi shopha (swelling over joints)	
No swelling	0
Swelling that can be seen on very carefully observation	1
Swelling that can be obviously observed	2
Swelling very bulky which can be observed clearly	3
Sandhi Graha (Stiffness in joints)	
No stiffness	0
Stiffness after first walking in the morning	1
Stiffness upto 5 min after walking, but is relieved after movement.	2
Stiffness continuous for 5 min, with difficulty in movement.	3
Stiffness more than 15 min	4
Crepitus	
No crepitus	0
Palpable crepitus	1
Audible crepitus	2

Tenderness	
No tenderness	0
Subjective experience of tenderness	1
Wincing of face on pressure	2
Wincing of face and withdrawal of affected part on pressure	3
Resist on touch	4

OBJECTIVE PARAMETERS

Table no-2: Showing grading of objective parameter(VAS SCORE)

VAS SCORE		Grade
No pain	0	0
Trivial pain	0-2.5	1
Mild pain	2.5-5.0	2
Moderate pain	5.0-7.5	3
Severe pain	7.5-10.0	4

1. Range of movement

- Normal Extension -10 degree
- Normal Flexion – 120 degree

2. X-ray -Kellgren and Lawrence Grading

- Normal findings – Grade 0
- Possible osteophytic lipping,Doubtful joint space narrowing (JSN)-Grade 1
- Definite osteophytes possible JSN-Grade 2
- Multiple osteophytes,definite JSN,Sclerosis-Grade 3
- Large osteophytes,Marked JSN,sever Sclerosis-Grade 4

MATERIALAND METHODS

- Janupichu with mahamasha taila for 7 days
- Upanaha with vatahara dravyas for 14 days
- Mathravasti with mahamasha taila for 14 days

JANUPICHU:

A cotton pad soaked with lukewarm mahamasha taila was kept over knee for 30 minutes.

UPANAHA:

A warm thick upanaha paste was applied for 8 hours which prepared with vatahara patras like nirgundi,arka,eranda ,sigru, chinchu, powder of godhuma,yava, tila, grated coconut,30 gm of saindhava lavana along with 50ml of maha masha tailam.

MATRA VASTI:

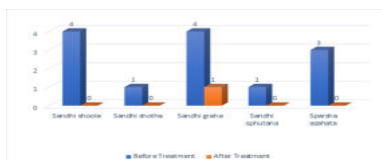
75 ml of lukewarm Mahamasha taila was administered to the patient in left lateral position.

OBSERVATIONS

Table no-3: Showing subjective and objective parameter before and after treatment

	SUBJECTIVE PARAMETERS	BT	AT
1.	Sandhi shola	4	0
2.	Sandhi shotha	1	0
3.	Sandhi graha	4	0
4.	Sandhi sputana	1	0
5.	Sparsha asahata	3	0
OBJECTIVE PARAMETERS			
6.	ROM	Restricted up to 10 degree	100 degree
7.	VAS score	4	0
8.	X-ray	Grade 4	Grade 3

Graph no 1: showing subjective parameter before and after treatment



BEFORE



AFTER



DISCUSSION

According to Ayurveda there are mainly 3types of dhamani present in body. Among these 4 tiryak dhamani, each has hundreds, thousands, innumerable branches. These branches contains Mukha which opens to romakupa. These mukha plays important role in the absorption of taila,jala,alepa etc helps to nourish the body internally as well as externally and tactile sensation also.⁵

The ushna,snigdha,sukshma gunas of upanaha drugs help in vatashamana. Retention of drugs for certain period of time in upanaha help in increase of temperature. local raise of temperature accelerate the local circulation which ultimately promote tissue healing,relaxation of muscle and fascia.

Janupichu may help to increase blood circulation to the affected area which helps to release of toxins and reduce inflammation. Long duration of contact enhances absorption of active principles helps in reducing pain and promote strength of the muscles.

The ingredients of mahamasha taila are tila taila,ksheera,kwatha of masha, ajamamsam, dashamoola and kalka of jeevaniya gana dravyas,trikatu,saindhava,kapikachu beeja6 etc. Most of the ingredients are Madhura rasa,guru,snigdha guna,sheeta virya, Madhura vipaka ,balya and brahmana karma which resulting in vata shamana and kapha sthapanu.Thaila is a best vata shamaka dravya.Pancha bhoutika composition of Madhura Rasa is Prithvi and Jala.Prithvi mahabhootha increases Asthi Dhatu and hence nourishes the Asthi.

Calcium and phosphorus are necessary elements for strengthening of bone7.Here ksheera,ajamamsa and masha are the richest source of calcium and phosphorus which prevent further degeneration and maintenance of bone mass.Vitamin-D present in cow's milk helps in bone formation by maintaining the proper levels of calcium in the blood.The drugs like masha and yashtimadhu contain chemical constituents like Genistein, liquiritin and glycyrrhizic acid which possess anti-inflammatory and antirheumatic property.

Acharya charaka has mentioned that “vasti vataharanam shrestham”8.vata dosha shamana and dhatu poshana is attained through the administration of vasti. The rectum is considered to be an organ with rich in vascularity. Drug administered through anal region cross rectal mucosa like any other lipid membrane in the trans rectal root as a result of entering general circulation. Thus vasti medicine have effect on entire body.

CONCLUSION

On the basis of present study it can be concluded that Vatahara Upanaha,Mahamasha taila janupichu and Mathravsti is significantly effective in reducing osteoarthritic changes of knee.There was significant relief in symptoms and mild changes in the X-ray before and after treatment in the limited period of treatment.The present single case study reveals the salient role of panchakarma in the management of osteoarthritis of knee.

REFERENCE:

1. Aspi F golwalla, Sharukh A golwalla, edited by. Milind Y Nadkar, 2016, golwalla's medicine for student's, A reference book for the family physician, 25th edition, pg. no 662-663
2. Pal CP, Singh P, Chaturvedi S, Pruthi KK, Vij A. Epidemiology of knee osteoarthritis in india and related factors. Indian J Orthop. 2016 sep;50(5):518-522.doi:10.4103/0019-5413.189608.
3. Kaviraj Atridevga Gupta,Astanga hrudayam,published by chaukhamba prakashan,Varanasi,edition 2019,pg no-376(As Ni-15/1).
4. Kaviraj Atridevga Gupta,Astanga hrudayam,published by chaukhamba prakashan,Varanasi,edition 2019,pg no-568(As Ni-21/22)

5. Kaviraj dr. ambikadatta shastrī, sushruta Samhita vol.1, published by choukhamba Sanskrit sansthan, Varanasi, edition 2016, pg. no 94, sushruta sharirasthana 9/9.
6. Aravattazhikathu K.V krishna Vaidya, Anekkaleelil. S.Gopalappilla,Sahasrayoga - sujanapriya vyakhyanam, published by Vidyarambham Publishers,Mullakkal ,Alappuzha, Edition 34,Taila prakarana
7. Sonal D Wankhede, Nitesh K Kamble, 2022, role of tiktaksheera basti and ajasthi bhasma in the management of asthikshaya janya katigata vata W.S.R. to degenerative lumbar spondylosis- A case study. Doi:10.46607/iamj5110102022
8. Charaka Samhita dr. bramhananda Tripathi, reprint 2016, choukhamba Sanskrit sansthana, Varanasi, pg. no 453(ch. Su. 25/40)