



Clinical study to assess benefits of *Gandhatail in Janu Sandhigatavata* w. s. r. to osteoarthritis of kneejoint at menopause – A clinical study.

Hema Dipak Hire*¹, Rajesh Maganlal Shah², Varsha Pyarelal Jaraje³

1. MD Scholar (*Swasthavritta*)
2. Guide, Principal and HOD of the *Swasthavritta* Dept.
3. Reader of *Swasthavritta* Dept.

*Corresponding Author: E -mail hemdeep.hire@gmail.com Ph. No.: 9823058091

Abstract:

Menopause is physiological process universally affects all women who reach midlife. Menopause defined as cessation of menstrual bleeding one year ago. But in recent era it is turning major problem as women are getting early menopause i.e. (*Akalaj Rajonivritti*) and it leads to menopause related problem like *sandhgataivata*. *Sandhigatavata* is one of the consequences of this process. Which is mentioned in classical text. The symptoms are swelling of joints, pain which increases on extension and flexion of joints. Which have similarities with signs and symptoms of Osteoarthritis mentioned by modern science. *Sandhigatavata* in *rajonivrutti* phase has to be understood under *dhatukshajanyasamprapti*. *Sandhigatavata* mentioned under title of *vatavyadhi*. In India it is more among menopausal women. Women have higher prevalence rate of osteoarthritis than men. Association of sex hormone, obesity and working pattern with

incidence and progression of OA in women. Obesity, severe physical activity clearly increases the risk for OA.

OA is degenerative joint disease occurring late in life characterized pathologically by focal degeneration of *articular* cartilage, *subchondral* bone thickening, marginal osteochondral outgrowth and joint deformity clinically by recurring episode of pain, *synovitis* with effusion, stiffness and progressive limitation of motion.

An attempt has been done to study a case report by using *Gandhatail* the formulation mentioned in Ayurveda's classical text for the treatment of *asthivahastrotasa*. It is *vatahara*, *shothahara* (anti-inflammatory), *shoolaghna* (analgesic) action. It is said to be very beneficial for degenerative bone and joint disorders.

Keywords:

Rajonivrutti, *Sandhigatavata*, Osteoarthritis (OA), *Gandhatail*.

INTRODUCTION:

In women's life menopause is a natural event as a part of the normal process of aging. WHO defined as those women who have stopped menstrual bleeding one year ago. *Rajonivrutti* is mentioned by almost all Ayurved classical text. According to *Sushruta Samhita* and other references too. 50 yrs. Is mentioned as the age of *rajonivrutti*.⁽¹⁾ This phase occurs due to *Dhatukshaya* (depletion of body tissue)⁽²⁾. *Vata dosha* is dominating in this phase. So *sandhigataavata* in *rajonivrutti* can be understood under *dhatukshayasamprapti*.⁽³⁾

Sandhigataavata mentioned under *vata vyadhi adbhaya*. According to Charaka Samhita *nidansevan* and phase of life after forty *aggrevevata*. And this *prakupitavata* gets accumulate in *rikta strotasa* where there is *snehadigunakshaya* and gives rise to various generalized and localized disease. In manifestation of *Janu sandhigataavata*, the *prakupitavata* travel along and gets lodged in *janu sandhi*. Where there is already *khavayugunya* resulting in *diminution* of *shleshakakapha*. Combined effect of all these process manifests the symptoms of *Janu sandhigataavata*.

The term osteoarthritis and *osteoarthrosis* (also *chondromalacia*, degenerative arthritis, hypertrophic arthritis) are currently used to define and idiopathic, slowly progressive disease of *diarthrodial* (synovial joint) occurring late in life and characterized focal degeneration of *articular cartilage*⁽⁴⁾. Subchondral bone thickening (sclerosis) marginal *osteochondral* out growths (*osteophytes*) and joint deformity. Clinically by recurring

episode of pain, synovitis with effusion, stiffness, and progressive limitation of motion and by narrowing of the joint interval, increased density and thickening of *subchondral* bone. The degenerative process firstly affect the *articular* cartilage. The wearing at process lacerated by continued injury and excess body weight⁽⁵⁾. As the cartilage wear and the bones of the joint rub against each other, the pain can become more severe and constant, interfering daily activity like walking, climbing stair.

The most common symptoms of knee arthritis are⁽⁶⁾

1. Joint pain, swelling, fluid accumulation in the joint and decreased tolerance for walking, sports, stair climbing and other activities.
2. Limited range of motion
3. Stiffness of knee
4. Swelling of the joint
5. Tenderness along the joint
6. Deformity of the joint

Sandhigataavata in *Rajonivrutti* or after *rajonivrutti* can be understood under *dhatukshaya janyasamprapti*. The prevalence of degenerative disease like *sandhigataavata* increases with commencing of *parihariavastha*⁽⁷⁾ (the phase of deterioration) after 40 years of age. Modern science believes estrogen deficiencies leads to increased osteoclast formation and enhanced bone resorption. Subchondral bone remodeling can culminate in either sclerotic or an osteoporotic phenotype. Estrogen deficiency in postmenopausal or *perimenopausal* women culminates in OA which is an osteoporotic phenotype.

Subchondral bone degeneration may be trigger for changes in the cartilage biomechanical and biochemical microenvironment, thus promoting cartilage erosion and ultimately OA progression.⁽⁸⁾

Gandha tail is poly herbal *ayurvedic* formulation with properties like analgesic, anti-inflammatory bone tonic anti arthritic and anti-oxidation. Ingredient of tail are black sesame, cow milk along with several other drugs⁽⁹⁾. It is very beneficial for degenerative bone and joint disorder. So this clinical study is planned to evaluate the efficacy of *gandhatail* in the management of *janusandhigatavata*. (OA of knee). It has *vathara*, *shothhara*, *shothghana* action.

Aim:

To study the effect of *Gandha tail* in *Janusandhigatavata* in menopause women.

Objective:

1. To study the efficacy of *Gandha tail* in *janusandhigatavata*.
2. To evaluate the relation of *janusandhigatavata* and menopausal age.
3. To review and study the complete literature available on *Gandha tail*.

Material and Methods:

Ayurvedic literature reviewed related to *Janusandhigatavata* and *Gandha tail*.

Case History

This study was done at Smt K.C. Ajmera Ayurved College OPD of SwasthavrittaDept.

A 50 yrs female came with complaints of bilateral pain in *janusandhi*, difficulty in walking, climbing stairs since 1 yr. Examination of the patient revealed

sandhishotha around both knee joints, tenderness 2+, *Vatapurnyaditisparsha* (crepitus) in both knees.

Prasaranaakunchanapravruttsamvedana.

Personal history:

Appetite – good, Bowel- Regular, Bladder – normal, Diet – complete twice. Sleep – sound, Addiction – nil.,

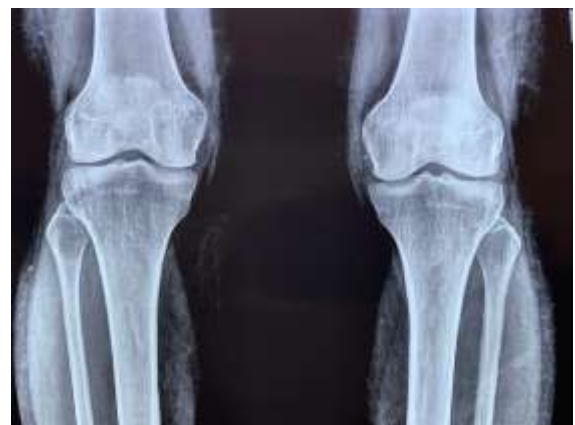
Thyroid profile, blood sugar was normal. Uric acid---

Urine Analysis shows 2-3 epithelial cells, no sugar, no protein present.

Pulse rate: 78/min BP : 130/80 mm of HG Weight : 62 kg.

History of hysterectomy 8 yrs back.

X- Ray revealed joint space reduction in both knee joint. More so in the medial compartment bilaterally and some osteophytes.



The diagnosis of osteoarthritis was established on the basis of above finding. In consideration with the finding of clinical examination and investigation following treatment given.

Follow up in 15 days interval, then follow up after 1 month interval for 2 months.

Treatment:

Treatment	Dose	Time	Duration	Anupan
Gandhatail Cap	300 mg	After every meal (twice a day)	Two months	Warm water.

Observation:

Symptoms	Before treatment	After 15 days of treatment	After 1 month of treatment	After 2 months of treatment
<i>Janusadhishool</i>	Sever	Relief of 50%	Relief of 70%	Relief of 80%
<i>Janushotha</i>	Moderate, pitting disappear in 20 sec	Moderate, pitting disappears in 20 sec	Moderate, pitting disappears rapidly	Moderate, pitting disappears rapidly
Difficulty in walking and climbing stairs	50 mtrs cannot walk	Can walk 100 mtrs	Can walk 100 mtrs	Can walk 200 mtrs
Crepitus(<i>vatapurnadritisparsh</i>)	Audible	Palpable	Palpable	Absent
<i>Prasarana akunchana sanvedana</i>	Prevent complete flexion	Pain ++	Pain +	Pain+

Discussion:

Prevalence of knee osteoarthritis increasing day by day. Systemic factors affecting joint vulnerability are gender, mainly females, age related factor. Obesity, occupation, faulty physical activity, these are leading to cause OA. And modern treatment is for OA mainly NSAIDs. Knee OA can be correlated with *janusandhigatavata*. Age, *Rjonivritti* result in *vata* vrudhi. This led to reduction in *kapha* residing in the sandhi i.e., *shleshakkapha* responsible for the lubrication of the joints reduces. *Sandhishithilya* results. Generates symptoms like *shotha*, *prasaranaakunchanavedana*, *atopa*. According to Ayurveda's principle to

break pathogenesis (*sampraptibhanga*) is *chikitsa* for *Janu sandhigatavataushna*, *kaphavata* shamak, *deepan*, *pachan*, *shothhara*, *vedanashamak*, *balya* and *rasayanadravyas* essential. Hence Gandha tail mentioned on *Asthivikara* by classical text of Ayurveda selected here. Tail is considered to be best in *vata* vyadhi. *Snehana karma* is adopted to bring about *snigdha* in the body. This will definitely reduce joint pain. Peer view show *Gandhatail* has anti-inflammatory effect.

Conclusion:

During this case study while reviewing various references noticed that *vata* is essential factor for development of *Janusandhigatavata*. Cardinal symptoms of *Janusandhigatavata* is similar to cardinal

features of osteoarthritis. Gandhatail is prepared using of sesame seeds, cow milk, lucorice, *kakolyadigana* and *eladigana* is found very effective in context of shola, *shotha*, *vatapurnadritisparsha*, *akunchanprasaranjanyavedana*. During this study not observed any adverse drug reaction.

References:

- 1 Kaviraj Dr AmbikaduttaShastri ; Sushrutasamhita ; Ayurveda Tattva-Sandipika Hindi Commentary; Chaokhambha Sanskrit Sansthan Varanasi, Sharirsthan 3 verse 9 ,page 9.
- 2 Kaviraj Dr AmbikaduttaShastri ;Sushrutasamhita ;Ayurveda Tattva-Sandipika Hindi Commentary; Chaokhambha SanskritSansthan Varanasi, Sutrasthan14 verse 6 ,page 64.
- 3 Brahmanand Tripathi. Charaksamhita ,Charakachandrikahindi commentary; Chaukhamba Surbharati Prakashan, Varanasi
- 4 Samuel Turek ,Orthopaedics Principles and their Application, 1989 Jaypee Brothers New Delhi , India.page 384.
- 5 Jennifer E Steven. Lapsley and Wendy MKohrt. Osteoarthritis in

women; effects of estrogen, obesity and physical activity ; Women's health magazine. 2010 ,page 601-615

- 6 Samuel Turek ,Orthopaedics Principles and their Application, 1989 Jaypee Brothers New Delhi , India. page 384.
- 7 Kaviraj Dr AmbikaduttaShastri; Sushrutasamhita; Ayurveda Tattva-Sandipika Hindi Commentary; Chaokhambha Sanskrit Sansthan Varanasi, Sharirsthan 3 verse 9 ,page 9
- 8 SindhuraA. S., Abdul Khader. Osteoarthritis in post menopausal women an approach through Ayurveda. International Ayurvedic Journal. May 2020 . Page 2340 – 2347.
- 9 Dr Ganesh Garde; SarthVagbhat; ChoukhambaSurbharatiPrakashan ;Uttersthan 27; Verse 36-41; page 437,438.
- 10 Kaviraj Dr AmbikaduttaShastri ;Sushrutasamhita; Ayurveda Tattva-Sandipika Hindi Commentary; Chaokhambha Sanskrit Sansthan Varanasi, Chikistarsthan 3 verse 55-59 , page 32.

Conflict of Interest: Non / Source of funding: Nil

Cite this article:

"Clinical study to assess benefits of Gandhatail in Janu Sandhigatvata w. s. r. to osteoarthritis of kneejoint at menopause – A clinical study."
Hema Dipak Hire, Rajesh Maganlal Shah, Varsha Pyarelal Jaraje

Ayurlog: National Journal of Research in Ayurved Science- 2022; (10) (02): 01-05