Efficacy of Shadanga Guggulu on Sandhigata Vata – A Randomized Controlled Study

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Abstract: Diseases of Bone and joints are very common now a days. A number of formulations are being practiced for the treatment of bone and joints disorders. Sandhigata vata (osteo Arthritis) is a chronic degenerative disorder, which affects the joints of the body causing pain. It makes life miserable and crippling, claiming the maximum loss of human working power. A randomized clinical trial was conducted at OPD of S.J.I.I.M., Hospital, Bangalore.40 cases with involvement of joints having clinical features of Sandhigata vata were selected. Almost all cases whichever completed the treatment, got improvement in their signs and symptoms. Statistically, result shows highly significant (p<0.001). Hence, the Ayurvedic drug Shadanga guggulu found to be effective in the management of Sandhigata vata (osteo Arthritis).

Key words: Sandhigata vata ,osteo Arthritis, shadanga guggulu

INTRODUCTION:

Nature is a state of constant change. Mobilization of natural resources is an integral part of this change. Mobilization may be internal occurring within a unit of nature or external occurring in the nature as a whole. Locomotion is an important part of transition. It may occur within a unit or between two units. Human beings are part of nature and constantly in a state of movement to fulfil nature role.

Till date Sandhigata Vata is a challenging disease and is the number one cause of disability in industrialized countries. The degenerative changes in the Sandhis by Prakupita Vata is the main phenomena in the Samprapti of Sandhigata Vata. Sandhis come under the Madhyama Roga Marga along with the involvement of Vata Dosha and Dhatukshaya make this disease Kashta Sadhya.

Osteoarthritis is the 2nd commonest problem in the world population i.e. 30%. The major risk factors associated with Knee joint are Age, female sex, obesity, occupational Knee bending. This makes an important cause of disability. Osteoarthritis, the most common articular disorder begins asymptotically in the 2nd and 3rd decades and is extremely common by the age of 70.

In the conventional system of medicine, administration of pain killers like NSAIDS (non-steroidal anti-inflammatory drugs), Narcotics, Corticosteroids, intra articular injections etc. which gives temporary relief & lastly surgery (Knee replacement), which are quite expensive, need hospitalization and also causes adverse effects constitute usual line of treatment.

Since disorders of movement cripple the individual with regard to both personal and professional life, it is imperative that these disorders are treated actively. An effort is made here to substantiate clinically the principles involved in the samprapti of sandhigata vata & samprapti vighatana of sandhigata vata using shadanga guggulu as per classical reference

OBJECTIVES OF THE STUDY:

To study the efficacy of shadanga guggulu on sandhigata vata in comparison with pathya ahara and vihara alone.

MATERIALS AND METHODS:

40 patients, both male and female of the age group of 40 to 70 years attending the O.P.D and I.P.D of Sri Jayachamarajendra Institute of Indian Medicine Hospital, Bengaluru were selected at random without bias of social, economic, educational or religious status.

DIAGNOSTIC CRITERIA:

The Diagnosis is mainly based on clinical presentation of patients according to signs and symptoms mentioned in classics and supplemented...
with signs and symptoms of Osteoarthritis of Knee Joint.

**INCLUSION CRITERIA:**
1. The patients with classical signs & symptoms of sandhigata Vata
2. Patients of age group of 40 yrs to 70 yrs.
3. Patients with radiographic evidence of Osteoarthritis namely reduced space & Osteophyte.

**EXCLUSION CRITERIA:**
1. Patients below 40 yrs. of age.
2. Patients with bony deformity.
3. Patients suffering from Rheumatoid Arthritis, Rheumatic heart disease, Gouty Arthritis
4. Other forms of arthritis and h/o injury

**STUDY DESIGN**
1. Patients fulfilling the inclusion criteria were selected for the study and divided into 2 groups A and B, randomly.
2. Patients in group A were administered with shadanga guggulu 12gms BD
3. Patients in group B were kept only on pathyaahara and vihara.
4. Findings were statistically analyzed.
5. Consent was taken from all subjects and Ethical clearance was also obtained.

**SCREENING AND RECRUITMENT:**
Patients visiting the OPD and IPD of Sri Jayachamarajendra Institute of Indian Medicine Hospital, Bengaluru were screened based on the inclusion and exclusion criteria and grouped into two.

**RANDOMISATION:** Lottery method.

**STATISTICAL ANALYSIS:** Using paired ‘t’test.

**DURATION OF THE STUDY:** 30 days.
Overall assessment shows that -

35% of patients showed marked improvement is group A and zero percent of patients in Group B.

35% of patients showed moderate improvement is group A and 5% patients in Group B. 15% of patients showed mild improvement in group A and also in group B.

15% of patients showed no change is group A and 80% patients in Group B.

Overall response is significantly better in Group A (Moderate/Marked response:70.0%) when compared to Group B (5.0%) with P<0.001.

DISCUSSION

Etymology and definition of Sandhigata Vata gives an idea about the accurate literary meaning of the disease. Sandhigata Vata is not included in 80 types of Nanatmaja Vata Vikara enumerated by Charaka, but Vatakhuddata is one of the Nanatmaja Vataj a Vikara mentioned by Charaka and according to Chakrapani the meaning of Khuda Vata is Gulpha Vata or Sandhigata Vata. Hence, it can be said according to Chakrapani, Sandhigata Vata is one of the Nanatmaja Vata Vikara.

The vatavyadhi chapter in all Samhitas gives a detailed description of Sandhigata vata in the context of Gatavata. Here the kupita Vata gets localized in Janusandhi leading to the manifestation of disease. Asthi dhatu is the ashraya sthana of Vata dosha, and Vata vruddhi results in Asthi kshaya. In Sandhigata Vata both these features can be seen.

Osteoarthritis, also called as Degenerative joint disorder, is most common form of chronic disorder of synovial joints. It is characterized by progressive degenerative changes in the articular cartilages over the years, particularly in the weight bearing joints, which shows a strong association with aging and is a major cause of pain and disability in the elderly. OA of the knee joints is the most common form of OA; hence the present study is designed on management of sandhigata Vata (OA) of Knee Joints.

Vata prakopaka nidanas are Samanya nidan for sandhigata vata.It includes Vata prakopak (i)Aahara (ii) Vihara & (iii) Manasika karanas.
This Samanya nidana sevana leads to Vata prakopa & these prakupita doshas travels all over the body. These prasarita doshas gets obstructed & does Sthansamshraya. Wherever there is Khavaigunya in asthivaha srotas that leads to further disease formation.

Sandhi shula, Sandhi shotha, prasarana akunchanayoho savedana pra vrutti and atopa are the important clinical features of Sandhigata Vata.

In Modern science same features are listed along with other symptoms pertaining to individual joints, as also tenderness and joint stiffness (implied by the restriction of joint movements). It is mentioned that any joint can get affected with Osteoarthritis. Thus, they have considered the weight bearing joints of the knees, hips, lower spine and peripheral joints of fingers and toes as well as conditions of Lumbar spondylosis also under Osteoarthritis.

The Chikitsa sutra of Sandhigata vata is Snehana (Bahya/Abhyantara), Upaha, Agnikarma, Bandhana, Unmardana.

Sandhigata Vata is a Madhyama Roga Margagata Vatika disorders in which vitiated Vata gets lodged in Sandhi. Hence to treat Sandhigata Vata drugs acting on both Vata and Asthi should be selected. According to Charaka, in Asthi Dhatu Dushti the treatment given should be Tikta Dravya sadhita Ghrita and Kshira. In Shadanga Guggulu predominance of Tikta rasa is there and Gritha also there.

According to Sushruta Samhita, Guggulu has pleasant odour, light, subtle, penetrating, hot in potency, pungent/bitter in taste, katu vipaka, laxative, good for heart unctuous and slimy. When fresh, it is stoutening and aphrodisiac, while old one causes thinning of the body, by its penetration and ushna veerya. It mitigates kapha and vata, being laxative it eliminates feces and mitigates pitta by its pleasant smell. It relives bad smell of the abdomen, by its subtleness it kindles digestive fire.

Shadanga Guggulu contains One part each of Rasna, Guduci, Erandamula, Devdaru, Sunthi and sarva sambhaga of Shuddha Guggulu and gritha, ingredients which have various types of actions in the body. Most of these ingredients are having Tikta Rasa, Ushna Virya and Madhura and KatuVipaka.

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Grith is having vatahara and rasayana property, prevents further dhutu kshaya and nourishes body, It is also having deepana property so maintains agni of the body which keeps body healthy. Tikta Rasa is having Lekhana property, so it helps in the weight reduction of the patients and helps in the management of Osteoarthritis.

Tikta Rasa is also having Jwaraghna and Daha Prashamana properties. Thus it acts as anti-inflammatory agent and can reduce the pain and swelling of the joints. Tikta Rasa has Vayu and Akasha Mahabhuta in dominance. Hence it has affinity towards the body elements like Asthi having Vayu and Akasha Mahabhuta in dominance.

Due to the Ushna property of Guggulu, it is one of the major Vatashamaka Dravya. Due to its Ruksha and Vishada Guna it acts as a Medohara. According to Sushruta all Guggulu have Lekhana property which helps in reducing body weight. Due to its Katu Rasa it acts as a Deepana. Thus it helps in the improvement of general condition of the patient. Old Guggulu also act as a Rasayana which helps in preventing any degenerative change in the body. Pharmacologically Guggulu has the property of anti-inflammatory, immunomodulatory and anti-lipidaemic action.

Overall effect of the Shadanga Guggulu is that it helps in pacification of aggravated Vata.

Statistically highly significant results were obtained among patients of group A. Among patients of group B who were placed on pathyaahara and vihara, no significant results were found

Comparison of response of patients between group A and group B showed that treatment in patients of group A produced highly significant results (p<0.001)

Marked response was observed in 07(35%) patients in Group A and no patient was found with marked response in Group B.

Moderate response was observed in 07(35%) patients of Group A whereas in Group B, 01(5%) patient showed moderate response. Both in Group A and Group B, 03(15%) patients showed mild response.
In Group A no response was shown by 03(15\%) patients whereas in Group B 16(80\%) patients showed no response.

From the above observations one can conclude that samprapthi vighatana with Shadanga guggulu with pathya ahara vihara proved to be more fruitful than samprapthi vighatana with only pathya ahara vihara.

This clearly states the superiority of Shadanga guggulu in the management of sandhigata vata along with pathya ahara and vihara when compared to only pathyaahara and vihara.

CONCLUSION:

Janusandhigata Vata comes under Vata vyadhi which is commonly associated with the Vardhakya and Dhatu kshaya is a prominent feature in its manifestation. Overall patients of group A treated with shadanga guggulu showed better response clinically and statistically than patients of group B (only pathya ahara vihara).

Overall response is significantly better in patients of Group A (Moderate/Marked response:70.0\%) when compared to patients of Group B (5.0\%) with P<0.001.

REFERENCES:


