ROLE OF NADISWEDA IN THE MANAGEMENT OF JANU SANDHISHULA WITH SPECIAL REFERENCE TO OSTEOARTHRITIS OF KNEE JOINT.

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Received on: 13/08/19; Revised on: 25/08/19; Accepted on: 26/08/19

ABSTRACT

Vatavikara are the leading health problem in current scenario. Especially Sandhigata Vikara occurs in large number of populations in parts of India. In our Nation, age group above 40 years faces the real problem of Osteoarthritis because of degenerative changes in joints. Some particular habits are also responsible for the degenerative changes. There is no alternate solution rather than taking painkiller or knee replacement in modern sciences but in Ayurveda numerous kinds of procedures are used to reduce the pain as well as regenerate the bones. In this article one of the such methods ‘Nadisweda’ is used to subside the painful condition of degenerative knee joint. Symptoms were reduced significantly. Statistical analysis (Chi square test) has shown significant results in all symptoms (P < 0.05).

Keywords: Nadisweda, Sandhigata Vikara, Osteoarthritis.

1. INTRODUCTION

The osteoarthritis is common problem seen in modern society. Out of which maximum number of patients face the problem mostly related with degenerative changes occurred in knee joint. These degenerative changes take place because of Vata Dosha. Vata is considered as an initiator, creator and destructor.1 Due to Vata Dosha certain diseases occurs in body.2 Age, excess of exertion and life style always leads to formation of many Vatvyadhi.3 This aggravated Vata Dosha destructs the functioning of Sandhi as well as Shleshak Kapha which further leads to presentation like Shula, Shotha etc.4 While treating the Vatvikara, Swedana plays very important role.5 In Vatvikara, because of Ruksha, Khara, Chala etc. Gunas, the Sandhi become Shithil, as Vata and Asthi has Ashrayashrayi Bhava, which leads to Asthikshaya in such cases6 Also, in Osteoarthritis, the clinical features are pain and swelling at the site of joint along with restricted moments. In such cases along with conservative treatment like physiotherapy or use of medicines like several kinds of pain killers, the best alternate is to prefer Swedana. There are numerous types of Swedana, out which Nadisweda is used which will help to improve the functions of Joints along with reduction of pain.7

Being lots of adverse effects of modern medicine and absence of complete cure, Ayurveda can stand tall in diseases like Sandhi Vikara (Osteoarthritis). Nadisweda is simple, cost effective, less time consuming, effective procedure which doesn’t have any adverse effect to health of patient. Patients can perform this procedure regularly at home if taught well. Hence to improve quality of life of patients of Sandhi Vikara, Nadiswedan can play major role. Hence Nadiswedan was selected in present study.

2. MATERIAL AND METHODS

Following material and methods were used for conducting the present trial research project.

2.1. Selection of Patients

The study was conducted on the 40 clinically and radiologically diagnosed patients of Osteoarthritis. Patients were selected using computer
generated random table number, irrespective of gender, religion or caste, occupation etc. They were registered in OPD of PMT’s Ayurveda College, Shevgaon, Dist. Ahmednagar. Informed written consent was taken from each and every study subject in the language known to them. IEC has approved present clinical trial. (PMT/AYU/IEC/2019/413)

2.1.1. Inclusion Criteria
◆ Age group between 40 to 60 years.
◆ Patient suffers from Janu Sandhishoola bilaterally.
◆ Patient having degenerative changes of Sandhi or Asthikshaya.

2.1.2. Exclusive criteria
◆ Patient having major deformity or pathology like TB, carcinogenic changes.
◆ Patient suffers pain due to fracture or any other deformity like gout, RA, Sciatica.
◆ Patient not mentioned in inclusion criteria.

2.2. Selection of Nadi Sweda
Swedana is mentioned as an Upkrama for Vatvyadi. Sweda relieves stiffness, normalizes the Vata Dosha, helps Sandhi to perform movements easily. Sweda is effective in those conditions where Vata is aggrevated. Swedana is the Poorvakarma procedure. Before Shodhana procedure Swedana Karma is necessary. But because of its Vataghna property it is widely used as a first line of Chikitsa of Vatadosha.

2.3. Management of patients and treatment schedule
Nadisweda of Bala Mula, Ashwagandha Mula and Nirgundi Patra was given to 40 registered patients for the period of 7 days continuously without Snehana karma for 10 minutes uniformly.

2.4. Plan of work
Type of procedure: Nadi Sweda
Drugs used: Bala Mula (Sida Cordifolia), Ashwagandha Mula (Withania Somnifera), Nirgudi Patra (Vitex Negundo)
Total duration of study: 30 days
Administration of Nadi Sweda: 07 days

Site of administration: Both the knee joints.
Follow ups: 1st day, 7th day, 15th day, 21st day, 30th day
Duration: 10 minutes /each seating

2.5. Criteria for assessment
Clinical assessment of symptoms and severity was done in terms of gradation symptoms. For this purpose, main sign and symptoms were given suitable scores. The score is recorded as per the schedule i.e. before treatment, during treatment and after treatment. The mentioned criteria for assessment are as follows

2.5.1. Subjective Parameters
Sashabda Kriya (Crepitation)
◆ 0: Absent
◆ 1: Occasional
◆ 2: Mild
◆ 3: Moderate
◆ 4: Severe

Stambha (Stiffness)
◆ 0: Absent
◆ 1: Occasional
◆ 2: Mild
◆ 3: Moderate
◆ 4: Severe

Shula (Pain)
◆ 0: Absent
◆ 1: Occasional
◆ 2: Mild but no difficulty in walking
◆ 3: Moderate but slight difficulty in walking
◆ 4: Severe pain with severe difficulty in walking

Shotha (Swelling)
◆ 0: Absent
◆ 1: Occasional
◆ 2: Mild but no difficulty in walking
◆ 3: Moderate but slight difficulty in walking
◆ 4: Severe pain with severe difficulty in walking
2.5.2. Objective Parameters

Walking distance
- 0: Patient can walk up to 1 km without pain
- 1: Patient can walk up to 500 m without pain
- 2: Patient can walk up to 250 m without pain
- 3: Pain on standing but patient can walk few steps
- 4: Pain on standing but patient can walk few steps

Folding / bending of knee joint
A. Indian toilet position
- 0: Patient can seat up to 5 minutes without pain
- 1: Patient can seat up to 3 minutes without pain
- 2: Patient can seat up to 2 minutes without pain
- 3: Patient feels pain on folding and can’t seat
- 4: Totally restriction of movements

B. Sitting on ground
- 0: Patient can seat up to 15 minutes without pain
- 1: Patient can seat up to 10 minutes without pain
- 2: Patient can seat up to 5 minutes without pain
- 3: Patient feels pain on folding and can’t seat
- 4: Totally restriction of movements

2.5.3. Investigations
- Routine hematological investigations
- X-ray of the B/L Knee joint Ant/ Post and Lat. Positions.

3. RESULTS AND DISCUSSION

3.1. Demographical Observations
22 (55%) patients were male and 18 (45%) patients were female (Table 1). Main occupation of patients was farming and hence male dominance in Osteoarthritis was found more than females. Among 40 patients 10 (25%) patients were from age group 51 to 55 years while 15 (37.5%) patients were from 56 to 60 years age groups (Table 2). Remaining patients were of age less than 50 years. It clearly showed that as age progresses severity and degeneration of Joint disease is increased. Vata gets more dominant in older ages which causes furthermore Dhatukshaya. 25 (62.5%) patients were with chronicity more than one year (Table 3).

3.2. Changes in parameters
In present study 40 patients of Janu Sandhi Shoola were treated with Bala-Ashwagandha-Mula and Nirgundipatra Nadisweda for 7 days. Within 15 days the symptoms got diminished remarkably. The good relief occurred in each aspect. Subjective parameters viz. Shula (Pain), Stambha (Stiffness), Sashabdakriya (Creation), Shotha (Swelling) and Objective parameters viz. Walking distance, sitting in toilet position, sitting on ground were assessed before, during and after treatment. It was observed that patients with Grade 4 and Grade 3 were more before treatment while patients with Grade 0, Grade 1 and Grade 2 were more after treatment. It means all symptoms were significantly reduced after treatment. Changes in parameters has been shown in Figure No 1 to Figure No 6. In maximum number of patients, no recurrence of symptoms was reported during the period of follow up after fifteen days. It might happen because of Ushna guna of Sweda which further leads to decrease in Shita Guna of Vata therefore pain got reduced. This helped to break the samprapti of Shula.

3.3. Statistical Analysis
Observations recorded during study were analyzed and findings were evaluated by using Chi square test as test of significance at 5% level of significance. Test has shown that all subjective and objective parameters have been reduced significantly, as value of P is less than 0.05 in case of each and every parameter. Values of Chi square (X²), Degree of freedom (DF) and Probability (P) has been shown in Table No 4.

3.4. Overall effect
At the end of treatment overall effect was calcu-
lated on the basis of symptom scores which was calculated in the form of percentages. 10 patients got excellent relief while 24 patients got marked relief. Overall effect of the study is shown in Table No 5.

3.5. **Nadisweda and its mode of action**

In the present study, **Nadisweda** has provided better relief in symptoms of the diseases. **Nadisweda** is performed for seven days. The drug that has been used are like Bala Mula, Ashwagandha Mula and Nirgudi Patra. **Swedana** acts as it reduces the excessive stiffness and pain, also heaviness and excess cold. It also develops the firmness in the body.\(^4\) **Shula** occurs due to due to vitiation of **Vata Dosha**. **Vata Dosh** has the qualities like Shita, Chala, Ruksha, Khara whereas, **Sweda** has properties that are opposite of **Vata Dosha**. Therefore, **Swedana** helps to reduce the **Shula**. In case of osteoarthritis of knee joint, it is said to be common clinical problem, which occurs usually above the 50 years of age. Presentation is with pain, swelling restricted movements along with stiffness after long rest. Onset is sudden with mild aching pain. Clinical features are like – Joint is swollen, effusion into the joint also synovium is thickened and tender. Sometimes crepitation heard on movement.\(^12\)

### Why Bala, Ashwagandha and Nirgundi?

**Bala**\(^13\) (Sida Cordifolia): Possesses qualities like Guru, Shita, Picchhil, Bala is of Madhura Rasa, Shita virya and Madhur Vipaki, Snigdha acts as Balya as well as shreshtha Vataghna dravya, gives strength to Sandhi.

**Ashwagandha**\(^14\) (Withania Somnifera): \(\text{Ashwagandha}\) is of Snigdha, Madhura, Kashaya, Ushna viryatmak and Madhur Vipaki. **Ashwagandha** reduces the pain because of **Ushna virya** therefore it is included in **Vedanasthapana Gana**. Also acts as Shothahara.

**Nirgundi**\(^15\) (Nigundo Trifolia): **Nirgundi** though contains Ruksha and Laghu, its Usna Virya acts as Vedanasthapana, Shothahara also Doshpachak. The poultice of Nirgundi patra acts as best analgesic.

### 4. CONCLUSION

**Vatvyadhies** are considered to be Dushchikitsya. Age, excess of exertion and life style always leads to formation of many **Vatvyadhies**. In old ages **Vata** creates certain types of diseases. In this presentation an attempt is made to present how **Vatavyadh** can get cured. **Nadisweda** of Ushna, Snigdha Guna subsides the Ruksha, Shitatva of Vata which finally ended up to subsiding Painful conditions of **Vatavyadhi**. In such condition use of **Vataghna Dravya** in **Swedana** procedure helps to improve the functioning of Janu Sandhi.

### 5. ACKNOWLEDGEMENT

I would like to acknowledge Mrs. Paurnima K. Purkar and Dr. Kishorkumar K. Purkar, Directors, Gurukrpa Hospital Parner, for their valuable help in the study. I also like to acknowledge hospital staff also other family members, colleagues and dear students for their valuable help in this work.

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7. TABLES AND FIGURES

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<th>Sr. No.</th>
<th>Gender</th>
<th>No of Pt</th>
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Table No 1 Gender

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Table No 2 Age

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<td>15</td>
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<td>2</td>
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Table No 3 Chronicity
**Table No 4 Statistical Analysis**

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<td>Mild</td>
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**Table No 5 Overall effect**

**Figure No 1 Changes in Shula**

**Figure No 2 Changes in Stambha**

Cite this article as:
Figure No 3 Changes in Sashabdakriya

Figure No 4 Changes in Shotha

Figure No 5 Changes in Walking distance

Figure No 6 Changes in Folding / Bending of Knee

Source of Support: Nil; Conflict of Interest: None declared.