



## SNEHANA AS A SOLE REMEDY IN OSTEOARTHRITIS: A CASE STUDY

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Received on: 07/09/16 Revised on: 20/11/16 Accepted on: 30/11/16

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DOI: 10.7897/2277-4343.076241

### ABSTRACT

Osteoarthritis is the most common chronic musculoskeletal disorder characterised by gradual loss of cartilage. It has symptoms like pain, swelling, stiffness or limited range of motion and these symptoms lie very close to the entity Sandhigata vata (osteoarthritis) in Ayurveda which is one among the 80 types of Vata vyadhi (diseases of Nervous system and musculoskeletal system). The Contemporary management has little effect on the disease. But the very detailed explanation of Ayurvedic management of Sandhigata vata is proved to be very effective. Here a case of 54 year old lady who presented with complaints of Pain, swelling and restricted movements of both knee joints along with low back and bilateral shoulder joints has been included. Based on the clinical signs and symptoms she was diagnosed as a case of Sandhigata vata (osteoarthritis) and was screened with Kellgrens radiological scale. All other diseases were ruled out based on the blood investigations. Treatment planned was Snehana (oleation) externally and internally as Abhyanga (massage) and Pana (drink) respectively. Assessment of condition of the patient before and after treatment was done based on Visual analogue scale and Womac scale for pain and physical activity grading, to evaluate efficacy of the treatment. Based on the assessment parameters, significant improvement was seen in the subjective symptoms and pain scale after the completion of a schedule of 30 days of treatment and a one month follow up. The physical activity grading also improved significantly. This implies the relevance of the present study in a commonest yet incurable degenerative disease.

**Key words:** Osteoarthritis, Sandhigata vata, Snehana, Sneha pana, Vata

### INTRODUCTION

As per Ayurveda, Dosha (biological humour) predominance in the body changes along with the process of ageing and Vriddha avastha (old age) is characterised by predominance of Vata dosha. Along with this, the wear and tear that the body encounters in a life time makes it susceptible to many degenerative conditions including Osteoarthritis. In the changing life style, the ageing process is accelerated leading to premature degenerative changes. Human body is composed of seven Dhatus among which the fifth one is Asthi (bone). Since Vata is having an ashraya-ashrayi bhava (interdependence) with Asthi (bone),<sup>1</sup> the degenerative changes are more pronounced in Asthi-Sandhi (bone-joint). Vata kopa (vitiated air humour) happens due to 2 reasons- Dhatukshaya (degeneration) and Margavarana (obstruction). Kupithavata (vitiated air humour) will take abode in different parts of the body where Khavaigunya (abnormality) exist, leading to manifestation of diseases. When Vata takes its abode in Sandhi it leads to a condition called Sandhigata vata with symptoms like pain, swelling and pain on Joint movements. It is an abnormal stage that occurs in the fourth or fifth decade of life due to Dhatukshaya<sup>2</sup> progressive decaying in the body structures resulting in various degenerative disorders. Since whole body resides on Asthi dhatu,<sup>3</sup> the diseased joints will limit everyday activities such as walking, dressing, bathing etc. thus making patient disabled or handicapped. It gives a huge burden by the way of financial and social impact on the patients.<sup>4</sup> Sandhigata vata is a Kashtasadhya Vyadhi (difficult to cure) due to its manifestation in the Madhyamaroga marga (vital structures) and old age.

The existing conventional mode of management of OA include the use of NSAIDs (Non-steroidal anti-inflammatory drugs) and

analgesics<sup>5</sup> which are already proved to be possessing lots of side effects. So, the treatment of such degenerative diseases should be aimed at providing relief to the suffering of patients and to improve the symptoms, so that they can live their life with minimal external support and disabilities.

As a Dhatukshayajanya Vyadhi (degenerative diseases), the prime line of treatment of Sandhigata vata<sup>6</sup> is Snehana which is given externally and internally and it presents with very encouraging results.

### MATERIALS AND METHODS

A 54-year-old female patient of MRD No 67844 and Bed No: 1 presenting with the following complaints was admitted in our hospital on 31.3.16 for 14 days and discharged on 12.4.16.

- Gradual onset of pain in bilateral knee joint, Low back and Bilateral shoulder joint.
- Swelling of bilateral knee joint.
- Restricted movements of Bilateral knee joint and Bilateral shoulder joints since 5 years.

On examination, Bilateral knee and shoulder joint were showing restriction of movements and Bilateral knee joint showed swelling. Kellgrens radiological scale<sup>7</sup> was noted based on the X ray of the Left Knee joint and other blood investigations like Routine blood test, RA, ASO, CRP were done to rule out other disease conditions. Based on the signs, symptoms, examinations and investigations, she was diagnosed as a case of Sandhigata vata and treatments were started.

**Treatment Protocol**

Treatment planned was Snehana, externally and internally as Abhyanga followed by Mrudu sweda (mild sudation) with Ksheerabala taila<sup>8</sup> and Vicharana snehapana (ghee in empty

stomach)<sup>9</sup> with Guggulutiktaka gritham<sup>10</sup> for a period of 14 days. Brihat panchamula bala siddha ksheera<sup>11</sup> was given as Samanaushadhi (internal medication) for 30 days. Subjective and Objective assessment was done before treatment, after treatment and during follow up.

**Table 1: Interventional Schedule**

| Days      | Treatment                | Duration | Drug                                | Dose                  |
|-----------|--------------------------|----------|-------------------------------------|-----------------------|
| 1-14 days | Abhyanga and Mrudu sweda | 40 min   | Ksheerabala Taila                   | 100ml                 |
|           | Vicharana sneha pana     | 6am,4pm  | Guggulu tiktaka ghritha             | 72ml in divided doses |
| 1-30days  | Samanaushadhi            | 11am     | Brihat panchamula bala ksheera paka | 96ml                  |

Treatment was administered as per the prescribed schedule. The ingredients of above mentioned medications are given below in the tables.

**Table 2: Ingredients of Ksheerabala Taila**

| S no | Drug       | Botanical name         |
|------|------------|------------------------|
| 1    | Bala mulam | <i>Sida cordifolia</i> |
| 2    | Tila taila | <i>Sesamum indicum</i> |
| 3    | Ksheeram   |                        |

Oil was prepared with the above ingredients for external application

**Table 3: Ingredients of Guggulutiktaka Gritha**

| S no | Drug         | Botanical name                   |
|------|--------------|----------------------------------|
| 1    | Nimba        | <i>Azadiracta indica</i>         |
| 2    | Amrita       | <i>Tinospora cordifolia</i>      |
| 3    | Vrisha       | <i>Adhathoda vasica</i>          |
| 4    | Patola       | <i>Tricosanthos dioica</i>       |
| 5    | Nidigdihika  | <i>Solanum surattense</i>        |
| 6    | Patha        | <i>Cyclea peltata</i>            |
| 7    | Vidanga      | <i>Embelia ribes</i>             |
| 8    | Suradaru     | <i>Cedrus deodara</i>            |
| 9    | Gajopakulya  | <i>Scindapsus officinalis</i>    |
| 10   | Nagara       | <i>Zingiber officinale</i>       |
| 11   | Nisa         | <i>Curcuma longa</i>             |
| 12   | Misi         | <i>Anethum sowa</i>              |
| 13   | Chavya       | <i>Piper chaba</i>               |
| 14   | Kushta       | <i>Saussuria lappa</i>           |
| 15   | Tejovati     | <i>Celastrus paniculatus</i>     |
| 16   | Maricha      | <i>Piper nigrum</i>              |
| 17   | Vatsaka      | <i>Holarrhena antidysentrica</i> |
| 18   | Dipyaka      | <i>Apium graveolans</i>          |
| 19   | Agni         | <i>Plumbago zeylanica</i>        |
| 20   | Rohini       | <i>Picrorhiza kurroa</i>         |
| 21   | Arushkara    | <i>Semicarpus anacardium</i>     |
| 22   | Vaca         | <i>Acorus calamus</i>            |
| 23   | Kanamula     | <i>Piper longum</i>              |
| 24   | Manjishtha   | <i>Rubia cordifolium</i>         |
| 25   | Ativisha     | <i>Aconitum heterophyllum</i>    |
| 26   | Visha        | <i>Frutillaria roylei</i>        |
| 27   | Yavani       | <i>Carum copticum</i>            |
| 28   | Sarja kshara | <i>Shorea robusta</i>            |
| 29   | Yava kshara  | <i>Hordeum vulgare</i>           |
| 30   | Gritham      |                                  |

Ghee was prepared with the above ingredients and given internally

**Table 4: Ingredients of Brihatpanchamoola Bala siddha ksheera**

| S no | Drug      | Botanical name                  |
|------|-----------|---------------------------------|
| 1    | Bilwa     | <i>Aegel marmelos</i>           |
| 2    | Kashmarya | <i>Gmelina arborea</i>          |
| 3    | Tarkari   | <i>Clerodendrum phlomidis</i>   |
| 4    | Patala    | <i>Stereospermum sauvealens</i> |
| 5    | Tuntuka   | <i>Oroxylum indicum</i>         |
| 6    | Ksheera   |                                 |



**Table 7: Scoring parameters and interpretation**

| Response | point |
|----------|-------|
| None     | 0     |
| Slight   | 1     |
| Moderate | 2     |
| Severe   | 3     |
| Extreme  | 4     |

Sum and average of WOMAC grading before and after treatment are calculated and compared.

**RESULTS**

After the treatment schedule of 14 days, the patient started getting a gradual relief of symptoms from the 5<sup>th</sup> day of admission and it has considerably decreased over the next 10 days. The assessment of symptoms is depicted in the tables 4 and 5 given below

**Table 8: Assessment chart of Subjective parameters**

| Sl No | Joints      | Pain |    |           | Swelling |    |           | Pain on joint movements |    |           |
|-------|-------------|------|----|-----------|----------|----|-----------|-------------------------|----|-----------|
|       |             | BT   | AT | Follow up | BT       | AT | Follow up | BT                      | AT | Follow up |
| 1     | Rt Shoulder | 3    | 0  | 0         | -        | -  | -         | 3                       | 2  | 0         |
| 2     | Lt Shoulder | 3    | 0  | 0         | -        | -  | -         | 3                       | 2  | 0         |
| 3     | Rt Knee     | 3    | 1  | 2         | 2        | 0  | 1         | 3                       | 2  | 2         |
| 4     | Lt Knee     | 3    | 1  | 1         | 2        | 0  | 1         | 3                       | 2  | 1         |
| 5     | Low back    | 2    | 0  | 0         | -        | -  | -         | 1                       | 0  | 0         |

BT -Before treatment, AT -After treatment

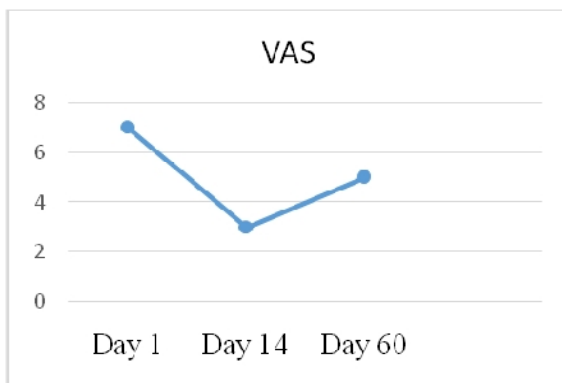
All the subjective parameters in the table show improvement.

**Table 9: Assessment chart of Objective parameters**

| Sl No | Scale                | Grading BT              | Grading AT             | Grading during follow up |
|-------|----------------------|-------------------------|------------------------|--------------------------|
| 1.    | VAS (Pain scale)     | 7                       | 3                      | 5                        |
|       | Right Knee joint     | 7                       | 2                      | 8                        |
| 2.    | Left Knee joint      | 7                       | 2                      | 2                        |
|       | Right shoulder joint | 7                       | 0                      | 0                        |
| 3.    | Left shoulder joint  | 7                       | 0                      | 0                        |
|       | Low back ache        | 3                       | 0                      | 0                        |
| ii)   | WOMAC Scale          | Sum = 28<br>Average=2.6 | Sum =16<br>Average=1.5 | Sum = 22<br>Average=2    |

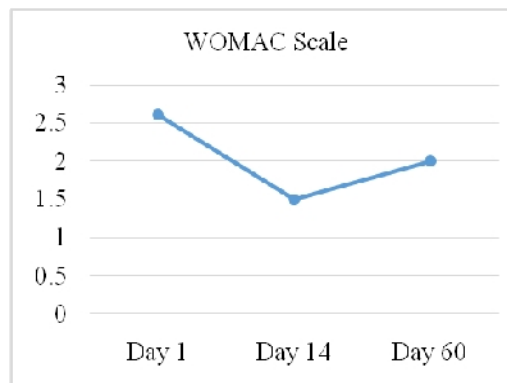
BT -Before treatment, AT -After treatment

Objective parameters are graded and compared



**Figure 2: Vas scale**

Visual analogue scale (consolidated) represented in line diagram shows improvement



**Figure 3: WOMAC Scale**

WOMAC Scale (Western Ontario and Mc Master universities) shows drastic improvement

**DISCUSSION**

Osteoarthritis is a crippling disease triggered by injury, old age, poor nutrition etc. The entity Sandhigata vata is a Nirupasthambhitha vata vyadhi (Diseases caused by vata) caused by Dhathukshaya and when we consider the Amsamsa Kalpana (qualities altered), the Ruksha guna (Drying quality) of vata is increased. The prominent symptom present here is Vedana(pain), due to the involvement of Vata dosha. So Snehana, which is the main modality of treatment of Vatadosha

is adopted here. As a part of Snehana, Ksheerabala taila which is used here for Abhyanga, has Bala and Taila, both Vatahara (Pacify vata) in nature. Snehana reduces the pain and loosens the mala in the body. It also pacifies the Rooksha guna of vata and brings back the Mrudutva (softness). Mrudu sweda given along with the Abhyanga will help in maladravatva.<sup>12</sup> Repeated application of Snehana and swedana will help to remove the stiffness and provide flexibility.<sup>13</sup> Bala which is prime ingredient of Taila also is Vatahara.

The Dhathus involved in sandhigata vata are Asthi and Majja since Asthi and Sandhi are the Majjavaha srotomula.<sup>14</sup> Gritha (Ghee) and Taila processed with Tiktara dravya (Bitter ingredients) are the main line of treatment told in Asthi majjagata vata.<sup>15</sup> Here Guggulu tiktaka gritha used for Pana is processed with Tikta rasa dravyas which strengthen the asthi by improving its khara guna (hard quality). Since it is Akasha mahabhutha (Ether) predominant, it acts as a medium for taking the Gritha to its site of action. Guggulu which is one of the main ingredient in the Gritha act as Vatakaphahara (pacify air and phlegm). Along with that the Snigdha guna (oily quality) of Sarpi helps in asthiposhana.<sup>16</sup>

Since it is a degenerative disease of joints, Brihat panchamulabalasiddha ksheerapaka which has the prime ingredient Ksheera, will act as Balya and Rasayana (rejuvenating). Brihatpanchamula and bala, both are Vatahara in nature. As a whole, all aspects of Osteoarthritis are covered by this frame of treatment.

## CONCLUSION

From this case study, it has become clear that Snehana has a very crucial and effective role in the management of Osteoarthritis. This case showed significant improvement in symptoms immediately after the treatment even though there is a slight increase noted after the follow up. This indicates that Snehana has a long way of action in the effective management of Osteoarthritis. But a longer duration study with a large sample size must be done to get more accurate conclusions.

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## Cite this article as:

Nayana N, Ratnaprava Mishra, Mahesh Kundagol, James Chacko. Snehana as a sole remedy in osteoarthritis: A case study. Int. J. Res. Ayurveda Pharm. Nov - Dec 2016; 7(6): 60-64 <http://dx.doi.org/10.7897/2277-4343.076241>

Source of support: Nil, Conflict of interest: None Declared

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