CLINICAL STUDY OF BRIHAN CHIKITSA IN NIRAMA AVASTHA OF SANDHI-GATAVATA WITH SPECIAL REFERENCE TO OSTEOARTHRITIS.

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Received on: 13/08/18; Revised on: 22/08/18; Accepted on: 25/08/18

ABSTRACT

Vyadhi is complex of Dosh and Dushya status in the body. Vyadhi avastha is the specific stage of the disease at particular point of time. Identifying Vyadhi avastha is always the key factor in successful treatment of any disease. Here honest attempt is done to treat Nirama avastha of Sandhigatavata by Brihan chikitsa keeping in mind to judge the Nirama avastha perfectly. Panchamruta Loha Guggulu orally and Panchaguna Taila locally (janubasti) were used to treat this avastha of Sandhigatavata. Total 30 patients were included and treated with above said treatment regimen for 30 days. Follow-ups were noted at the interval of every 7 days. At the end of day 30 we observed fruitful results. Wilcoxon signed ranks test has shown significant results in all three abovesaid treatment regimen for 30 days. Follow

1. INTRODUCTION

Vyadhi is Dosh-Dushya samurchchhana janya status in the body.¹ Dosh is either Vata, Pitta, Kapha or combined. Dushya is either Dhatu, Avayava, Strotas or Mala. According to Dushya and its place same Dosh can generate different types of diseases. Disease after its occurrence reflects different changes in its presentation either naturally or due to treatment. Such changes are called as Vyadhi avastha. Kala in Ayurveda for application of bhesha- ja (treatment) is of two Kshanadi or Vyadhi Avastha.² Vyadhi Avastha is a Kala (phase) of any disease at that specific time. Every disease should be treated according to Vyadhi Avastha to get rid of it completely. Sama avastha, Pachyamana avastha and Nirama avastha are commonly observed phases of any of disease.³ Practically we have to deal with at least two phases i.e. Sama Avastha and Nirama Avastha to treat that disease. If diagnosis of Vyadhi Avastha is missed or miss interpreted the treatment given will not give fruitful results.

Likewise, two major pathogenesis of Vatavyadhies are mentioned by Acharya Charaka viz. Margavarodhajanya and Dhatukshayajanya type.² Margavarodhajanya and Dhatukshayajanya Vatavyadhies reflects either Sama or Nirama avastha during its course. Sandhigatavata is one of the 80 types of Nanatmaja Vyadhis of Vata.⁴ Both Margivaradhajanya and Dhatukshhayajanya Vatavyadhies are seen. Symptoms in Nirama Avastha of Sandhigatavata are Sandhishula, Sandhi Atopa and Akunchana-Prasarana Vedana. Samyaka-kshudha, Angalagaha, Malamutra samyaka pravartana, Prasanna Indriya (Utsaha) are the indicators to denote Nirama avastha of any vyadhi.⁵ Brimhana, Ra-sayana, Balya, Guru, Snigdha drugs are indicated in Nirama avastha. Sandhigatavata is common disease in today’s era. Sandhigatavata can be correlated with Osteoarthritis.

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Its prevalence is increasing day by day. Prevalence rate of Osteoarthritis is 10.00% in male and 13.00% in females. Osteoarthritis (OA) is the most common chronic (long-lasting) joint condition. This can cause pain, stiffness, and other symptoms. There is no complete treatment for Sandhigatavata in modern medicine, where Ayurveda can give complete solution from treasure of its knowledge. Our hospital lays in rural area where most of patients are either farmers or labors doing hard work. Hence incidence of Sandhigatavata is more in area of our hospital. Considering all these things Sandhigatavata was selected for clinical trials. In the present clinical study 30 patients of Nirama avastha of Sandhigatavata were treated with Panchamruta Loha Guggulu orally and Panchaguna Taila Janubasti locally for 30 days. There is further scope to carry out comparative clinical trials on the present study.

2. METHODS

2.1. Study design

Clinical Study

2.2. Place of study

OPD and IPD of Kaychikitsa and Panchakarma, Shri Sant Eknath Ayurved Rugnalaya of PMT’s Ayurved College, Shevgaon.

2.3. Duration of the study

Total duration of the study was 6 months. Duration of treatment given to each patient was 1 month. Follow ups were taken at every week.

2.4. Objectives

- To study Sandhigatavata in detail from Ayurvedic Classical Literature.
- To study Sama and Nirama avastha in detail.
- To study the concept Brimhan.
- To study efficacy of Panchamruta Loha Guggulu along with Panchaguna Taila Janubasti in Niram avastha of Sandhigatavata.

2.5. Method of selection of patients

Sampling Technique

30 patients were selected randomly by using Simple Randomized Sampling Technique. (Table of Random numbers.)

Inclusion Criteria

- Age between 40 to 60 years, both sexes.
- Patients showing symptoms of Niram Sandhigatavata.
- Patients willing to participate in the study.

Exclusion Criteria

- Age below 40 and above 60 years.
- Patients having symptoms Sandhishotha, Sandhi-aushnya and Stambha.
- Severe osteoarthritis.
- Post-operative joint pain, past history of fracture.
- Patients with other major systemic illness.
- Patients not willing to participate in the study.

2.6. Method of Administration of Drugs

All patients were treated orally by Panchamruta Loha Guggulu along with Panchaguna Taila Janubasti locally for 30 days. Panchamruta Loha Guggulu was advised after meal (Adhobhakta kala). Drug administration details are illustrated in Table No. 1.

2.7. Drug Review

Panchamruta Loha Guggulu

It contains Parada, Gandhaka, Raupya, Abhraka, Swarnamakshika, Loha, Guggulu. (Details of drugs are illustrated in Table No. 2)

Panchaguna Taila

It contains Haritaki, Bibhitaki, Amalaki, Nima, Sambhalu, Mom, Gandhabiroja, Shilajita, Rala, Guggulu, Karpoor. (Details of drugs are illustrated in Table No. 3)

2.8. Method of Janubasti

- The patient was asked to lie on his back on the massage table (Droni).
- Leakproof reservoir made of black gram dough (covering knee) was built upon the affected Knee Joint.
- The lukewarm Panchaguna Tail was slowly poured into it.
- When that cooled down, it was squeezed out with cotton gauze and the procedure was repeated. (30 min in total)
- At the end of the procedure, the ring was removed and the affected area was gently massaged.
The patient was then asked to take rest for a short while.

2.9. Assessment Criteria

Patients were assessed on the basis of BT & AT score of symptoms and on the basis of Effect of Therapy. Assessment criteria were as follows-

Sandhishula

0 – No Sandhishula
1 – Mild Sandhishula, but patient can do his daily work
2 – Moderate Sandhishula, sometimes patient cannot do his daily work
3 – Continuous Sandhishula always disturbing daily routine of patients

Sandhi Atopa

0 – No Sandhi Atopa
1 – Sandhi Atopa felt on palpation only
2 – Sandhi Atopa heard to ears also

Akunchana-Prasaranata Vedana

0 – No Akunchana-Prasaranata Vedana
1 – Akunchana-Prasaranata Vedana after work or walking only
2 – Akunchana-Prasaranata Vedana at rest also.

Assessment of Effect of therapy

Effect of therapy was evaluated on the basis of relieved symptom score after treatment. Criteria for effect therapy assessment were - Marked Improvement (75 to 100% relief), Moderate Improvement (50 to 74% relief), Mild Improvement (25 to 49% relief) and Poor Improvement (00 to 24% relief).

2.10. Ethical Clearance

Ethical Clearance was obtained from Institutional Ethical Committee.

3. RESULTS AND DISCUSSION

Few facts observed in present study are being highlighted here with logical reasoning. Maximum patients (18, i.e. 60%) were observed in age group 55 to 60 years and none patients were observed below 45 years (Figure 1). It is clear that, Sandhigatavata (Osteoarthritis) is disease of old age. Female patients (20, i.e. 66.67%) were found more than male patients (Figure 2). It is well-known that prevalence rate of Osteoarthritis is more in females than in Male.7 Incidence of Sandhigatavata (Osteoarthritis) was found maximum in Farmers (13, i.e. 43.33%) and in Labors (12, i.e. 40%) while very less in housewives and servicemen (Figure 3). Farmers and Labors has to do hard and strenuous work daily. This might be because hard and strenuous work are hettu for Vatavyadhí as per Acharya Charaka.15 Among all, 24 (i.e. 80%) patients were found having family history of Sandhigatavata. It might be due to by chance only, because only few forms of OA have a heritable component.16

Wilcoxon Signed Ranks test was applied to observe significance of the treatment at 5% level of significance. Values of Wilcoxon stat (W) and value of P are along with BT and AT mean are elaborated in Table 1. Since values of P are very less than 0.05, it was found that given therapy has shown highly significant results in Sandhigatavata. Hence it was Panchamruta Loha Guggulu orally along with Panchaguna Tail Janubasti is highly effective to reduce Sandhishula, Sandhiatopa and Akunchana-Prasaranata Vedana in Sandhigatavata. 20 patients have shown Marked improvement, 9 patients have shown Moderate improvement and 1 patient has shown Mild improvement (Table x). Relief in Sandhishula was 79.75%, relief in Sandhiatopa was 84.62% and relief in Akunchana-Prasaranata Vedana was 72.5% (Table x). Sandhigatavata is commonly found in old age.14 Out of both types of pathogenesis of Vatavyadhí Sandhigatavata is Dhautshayjayanya Vavyadhi. Vitiated Vata enters in Rikta striotas of body and leads to Vatavyadhi is the main pathogenesis.15 In both Dhautshayjayanya Vatavyadhi and Niram avastha main indicated Chikitsa upakramas is Brihan. The treatment which increases body tissues is called Brihan.18 Vruddha, Durbal, Krusha, Khatsheena etc. are indicated for Brihan karma.19 In Vatavyadhí Chikitsa, Snehan is the main treatment regimen.20 Santarpan (i.e. Brihan) chikitsa is mainly indicated in Niram avastha of any vyadhi.21

Panchamruta Loha Guggulu and Panchaguna Tail are having Brihan, Rasayana, Vatagna and Santarpana properties and hence we got fruitful results in present study. Mode of action of Panchamruta Loha Guggulu and Mode of action of Panchaguna Tail Janubasti both are explained in Table No. 6. Present study was carried out in very less sample size drawn from limited population and hence having its self-limitation. Trials were carried out in only Trial group. There is vast scope for Comparative or
Randomized Clinical Trials in large sample for further study to draw more fruitful interferences.

4. CONCLUSION

After completion of study successfully we have reached to few conclusions as follows-

- **Vyadhi avastha** diagnosis is important step in treatment of any diseases.
- **Sandhigatavata** (Osteoarthritis) is commonly Dhatukshayajanya vatavyadhi of aged people.
- **Sandhigatavata** (Osteoarthritis) was found more incident in Females, Farmers, Labors and peoples with family history of Sandhigatavata.
- **Panchamruta Loha Guggulu** along with **Panchaguna Tail Janubasti** was found significantly effective in **Nirama avastha** of Sandhigatavata. (P<0.05)
- 20 patients (66.67%) achieved Marked improvement. (i.e. above 75%)
- **Brihan Chikitsa** is fruitful in Nirama Avastha of Sandhigatavata.
- No adverse effects were observed by the treatment.

5. ACKNOWLEDGEMENT

We are very thankful to Management, Principal and Medical Superintendent of our institute as they permitted, guided and helped us to carry out clinical trials.

6. REFERENCES

2. Dr Ganesh Krishna Garde Editor(s), (Reprint ed.). Ashtang Hrudaya of Vagbhata, Sutrasthana; Ayushkamiya Adhyaya:Chapter 1, Verse 24. Pune: Anamol Prakashana, 1999; p. 4.
7. TABLES AND FIGURES

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Head</th>
<th>Panchamruta Loha Guggulu</th>
<th>Panchaguna Taila</th>
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<td>Route</td>
<td>Oral</td>
<td>Local (Janubasti)</td>
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<tr>
<td>2</td>
<td>Matra</td>
<td>500 mg</td>
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</tr>
<tr>
<td>3</td>
<td>Kala/Avadhi</td>
<td>Adhobhakta 8 x BD</td>
<td>30 min. x OD</td>
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<td>4</td>
<td>Anupan</td>
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<td>5</td>
<td>Duration</td>
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<td>30 days</td>
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<td>6</td>
<td>Follow ups</td>
<td>Day: 0, 7, 15, 22, 30</td>
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Table No 1 Method of Administration of drugs

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<td>Raupya</td>
<td>Silver (Ag)</td>
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<tr>
<td>4</td>
<td>Abhraka</td>
<td>Mica</td>
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<tr>
<td>5</td>
<td>Swarnamakshika</td>
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<td>Loha</td>
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<td>7</td>
<td>Guggulu</td>
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Table No 2 Contents of Panchamruta Loha Guggulu

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<tr>
<td>2</td>
<td>Bibhitaki</td>
<td>Terminalia Bellirica</td>
<td>5 parts</td>
</tr>
<tr>
<td>3</td>
<td>Amalaki</td>
<td>Emblica Ribes</td>
<td>5 parts</td>
</tr>
<tr>
<td>4</td>
<td>Nima</td>
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<td>Sambhalu</td>
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<td>Gandhabiroja</td>
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<td>Shilajita</td>
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<td>Rala</td>
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<tr>
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Table No 3 Contents of Panchaguna Tail
### Table No 4 Statistical Analysis by Wilcoxon Signed Ranks Test

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**Table No 5 Effect of Therapy**

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<td>75% to 100%</td>
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<td>2</td>
<td>Moderate</td>
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<td>3</td>
<td>Mild</td>
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<tr>
<td>4</td>
<td>Poor</td>
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### Panchamruta Loha Guggulu

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### Panchaguna Tail (Janubasti)

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<td>Tila Taila</td>
<td>Snigdha, Kapavatahara, Yogavahi, Balya, Brihana</td>
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Table No 6 Mode of Action

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Figure No 1 Age wise distributions
Figure No 2 Gender wise distributions

Figure No 3 Occupation wise distributions
Figure No 4 Family History wise distributions

Figure No 5 Percent relief in symptoms

Cite this article as:

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