A Clinical Evaluation of Agnikarma In Sandhigata Vata W.S.R. To Cervical Spondylosis

*Dr. Mukesh Kumar Meena, ** Prof H.K. Kushwah

ABSTRACT

Ayurveda, the science of life has its own methodology and hypothesis to manage all kind of diseases. Sandhigata vata is one of the commonest joint disorder broadly coming under vata vyadhi and affects to the skeletal system in the geriatrics, because more vulnerability to dhatu kshaya at that span of life. vata dosha get provoked due to dhatu kshaya (degenerative process) or avarana prakriya and produces various types of vatic vyadhies.

Now a days joint disorders are one of the main cause of distress after fourth decade of age. though medical science provides powerful analgesics and new surgical procedures, but due to side effects and further complications, the disease is as such remains as a challenge to medical fraternity. clinical study is most established method to revive all treatment hypothesis scientifically.

Agnikarma is a para-surgical procedure, advocated by Acharya Sushruta for asthi, sandhi, sira and snayugata vata vikaras and it is highly effective without producing any further complications in comparison to modern surgical procedures.

The drug Nirgundi and Shigru Yukt Trayodasanga Guggulu consisting Rasayana, Balya, Vatsamaka, Amapachana drugs are the best way to treat as well as control degenerative process (dhatu kshaya) in Sandhigata vata.

Keeping all these facts in mind treatment modality of Sandhigata vata has been designed to equalize the efficacy by Agnikarma and Trayodasanga Guggulu.

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INTRODUCTION

Sandhigata Vata is one of the commonest joint disorder broadly comes under Vata Vyadhi and affects the skeletal system in the geriatrics. This age group is more vulnerable to Dhatu ksaya. Vata Dosa becomes provoked due to Ksaya or Avarana prakriya and produces various types of Vatik Vyadhies. To over come such type of degenerative process and symptomatology various research work are going on to find out new remedy in surgical as well as medical system.

Agnikarma is a Para surgical procedure, advocated by Acarya Susruta for Asthi, Sandhi, Sira, Snayugata Vatavikaras and it is highly effective without producing any further complication. Though Agnikarma is one of the most important Para surgical procedure but not in wide practice. Rasayana, Balya, Vatasamaka, Amapacana drugs are the best way to treat as well as control degenerative process (Dhatu ksaya).

Keeping all these facts in mind treatment modality of Sandhigata Vata has been designed to equalize the efficacy by Agnikarma and Nirgundi & Shigru Yukt Trayodasanga Guggulu with following aim and objects.

AIMS AND OBJECTS

1. To assess the efficacy of Agnikarma in Sandhigata Vata.
2. To assess the efficacy of Nirgundi & Shigru Yukt Trayodasanga Guggulu in Sandhigata Vata.

MATERIALS AND METHODS

Patients attending the O. P. D. & I. P. D. of Shalya dept. NIA, Jaipur were randomly selected based on the clinical feature and a detailed research Proforma was prepared to observe the clinical feature and disease pathology. The study was exclusively based on clinical trials.

Selection of patient:-
- Sula (Pain) in cervical region
- Stambha (Stiffness) in Cervical region
- Graha (Restricted movement) of neck

Associated symptoms:-
- Bhrama (Giddiness)
- Sira sula (Headache)
- Cimcimayana hasta (Tingling sensation in hand)
- Suptata (Loss of sensation)

Exclusion criteria: -
- Uncontrolled Diabetes mellitus
- T. B. Spine
- Carcinoma of Cervical vertebra

Investigation: -
Routine - Blood, Urine analysis
‘X’ Ray of Cervical vertebrae – A. P. / Lateral view.

Grouping and Management: -
Patients were randomly divided into two groups

Group—A — Agnikarma group

In this group Bindu type dahana visesa was made at the most painful area of neck and at other areas also. Each patient was given four sitting of Agnikarma at the interval of seven days. Duration of schedule was one month.

Group – B – Nirgundi & Shigru YuKt Trayodasanga Guggulu

In this group Trial drug was given 1gm B. D. in divided doses with Luke warm water for one month.
Agnikarma Vidhi:-

Like other therapeutic procedure Agnikarma cikitsa divided into three phases according to Trividha upakarma.

Purvakarma:-

§ Advised to take Snigdha, Pichhila Aahara prior to this procedure
§ Preparation of Triphala Kasaya, Yastimadhu churna, Kumari swarasa.
§ Pancha dhatu salaka was heated up to red hot
§ Preparation of local part—Local part (Neck area) was washed with Triphala Kasaya and wiped with dry sterilized gauze piece and covered this area with a cut sheet.

Pradhana karma:-

Samyak dagdha vrana was made in vilekha dahana vishesa by red hot pancha dhatu salaka. Simultaneously kumari swarsa was applied to relieve burning sensation. Minimum space was given between two points and care was taken that Samyak dagdha Vrana was produced.

Paschat karma

Application of Kumari swarasa:

Immediately after doing Agnikarma Kumari swarasa applied to relieve burning sensation. Then Kumari swarsa was completely wiped out by sterilized gauze piece.

Dusting of Yastimadhu Churna:

Yastimadhu churna was applied over the samyak dagdha Vrana and Vrana was completely filled to prevent contamination

- Advised to apply paste of Haridra powder and Coconut oil at night period.
- Restricted to touch water for 24 hr.
- Advised to avoid dietetic regimen like Rice, Sigru, Brinjle, Ground nut, Potato, Beans etc.
- 7 days gap was kept between two sittings.

Criteria for assessment:

The improvement in the patient was assessed mainly on the basis of relief in the cardinal signs and symptoms of the disease. To assess the effect of therapy objectively, all the signs and symptoms were given scoring depending upon their severity as below:

Pain:-

No Pain — (0)

Pain in Neck, mild aggravation with movement without Radiation — (1)

Pain in Neck, severe aggravation with movement without radiation to arm — (2)

Pain mild or severe with radiation to arm — (3)

Pain in neck, radiation, and disturbed sleep — (4)

Restricted movement:

Flexion—

No restriction- Able to touch the interclavicular line — (0)

Upto 2 cm difference between the chin and inter clavicular line — (1)

2-4 cm difference between the chin and interclavicular line — (2)

More than 4 cm difference — (3)

Extension—

Normal i.e. able to extend the head up to the level when tip of nose and forehead becomes in horizontal plane approximately flexion to extension—130 degree

Moving up to 120 degree — (1)

Movement upto 110—120 degree — (2)

Movement <120— degree — (3)

Lateral rotation—

Normal i.e. able to make complete rotation of neck — (0)

Rotation with little difficulty — (1)

Rotation side to side only — (2)

Rotation one side only — (3)

Lateral Flexion—

Ear touches to shoulder tip — (0)
Up to 3cm difference between the ear and shoulder  - (1)
3-5 cm difference between the ear and shoulder tip  - (2)
More than 5cm difference  - (3)

Stiffness—
No Stiffness  - (0)
Mild Stiffness  - (1)
Stiffness, relived by external application  - (2)
Stiffness, relived by medication  - (3)
Stiffness, is not responded by medicine  - (4)

Bhrama—
No Bhrama  - (0)
Up to 1hr  - (1)
Up to 2hr  - (2)

Chimchimayana hasta—
Absant  - (0)
Occasionally  - (1)
Up to 1hr  - (2)
Up to 2hr  - (3)
More than 3hr  - (4)

OBSERVATION
Demographics and Patient characteristic

<table>
<thead>
<tr>
<th>Group</th>
<th>Nos. of patient registered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Regd.</td>
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<tr>
<td>A</td>
<td>18</td>
</tr>
<tr>
<td>B</td>
<td>15</td>
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Effect of Agnikarma cikitsa

<table>
<thead>
<tr>
<th>Cardinal Symptom</th>
<th>n</th>
<th>Mean score</th>
<th>SD</th>
<th>SE</th>
<th>‘t’</th>
<th>p</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B .T.</td>
<td>A.T.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>±</td>
<td>±</td>
<td></td>
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</tr>
<tr>
<td>Sula</td>
<td>11</td>
<td>3</td>
<td>0.72</td>
<td>0.46</td>
<td>0.46</td>
<td>16.25</td>
<td>&lt;0.001</td>
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<tr>
<td>Stambha</td>
<td>10</td>
<td>1.9</td>
<td>0.7</td>
<td>0.42</td>
<td>0.42</td>
<td>9.23</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Graha</td>
<td>4</td>
<td>2</td>
<td>0.75</td>
<td>0.5</td>
<td>0.5</td>
<td>5</td>
<td>&lt;0.02</td>
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<td>4</td>
<td>1.25</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>3</td>
<td>&gt;0.05</td>
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<tr>
<td>Sira Sula</td>
<td>10</td>
<td>1.3</td>
<td>0.5</td>
<td>0.42</td>
<td>0.42</td>
<td>6.15</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Chichimayana Hasta</td>
<td>3</td>
<td>1.33</td>
<td>0.66</td>
<td>0.57</td>
<td>0.57</td>
<td>2</td>
<td>&gt;0.10</td>
</tr>
<tr>
<td>Suptata</td>
<td>2</td>
<td>1.5</td>
<td>1</td>
<td>0.71</td>
<td>0.71</td>
<td>1</td>
<td>&gt;0.10</td>
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</table>

Effect of Nirgundi and Shigru Yuks Trayodasanga Guggulu

<table>
<thead>
<tr>
<th>Cardinal Symptom</th>
<th>N</th>
<th>Mean score</th>
<th>S.D.</th>
<th>S.E.</th>
<th>‘t’</th>
<th>P</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B .T.</td>
<td>S.D.</td>
<td>S.E.</td>
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<tr>
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<td>A.T.</td>
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</tr>
<tr>
<td>Sula</td>
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<td>1.1</td>
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<td>Stambha</td>
<td>5</td>
<td>1.8</td>
<td>0.71</td>
<td>0.31</td>
<td>3.22</td>
<td>&lt;0.05</td>
<td>55</td>
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<tr>
<td>Graha</td>
<td>9</td>
<td>1.9</td>
<td>0.33</td>
<td>0.11</td>
<td>10</td>
<td>&lt;0.001</td>
<td>59</td>
</tr>
<tr>
<td>Bhrama</td>
<td>3</td>
<td>1.33</td>
<td>0.57</td>
<td>0.33</td>
<td>2</td>
<td>&gt;0.10</td>
<td>62</td>
</tr>
<tr>
<td>Sira Sula</td>
<td>6</td>
<td>1.66</td>
<td>0.57</td>
<td>0.33</td>
<td>2</td>
<td>&gt;0.10</td>
<td>62</td>
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<tr>
<td>Chichimayana Hasta</td>
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<td>0.42</td>
<td>0.14</td>
<td>6.07</td>
<td>&lt;0.001</td>
<td>67</td>
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<tr>
<td>Suptata</td>
<td>3</td>
<td>1.33</td>
<td>0.66</td>
<td>0.33</td>
<td>2</td>
<td>&gt;0.10</td>
<td>50</td>
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Comparative study of Results of both group

<table>
<thead>
<tr>
<th>Cardinal Symptoms</th>
<th>Group A</th>
<th>Group B</th>
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<tbody>
<tr>
<td>Sula</td>
<td>76%</td>
<td>63%</td>
</tr>
<tr>
<td>Stambha</td>
<td>63%</td>
<td>55%</td>
</tr>
<tr>
<td>Graha</td>
<td>62.5%</td>
<td>59%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associated Symptom</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhrama</td>
<td>60%</td>
<td>62%</td>
</tr>
<tr>
<td>SiraSula</td>
<td>61%</td>
<td>69%</td>
</tr>
<tr>
<td>Cicimayana Hasta</td>
<td>50%</td>
<td>67%</td>
</tr>
<tr>
<td>Suptata</td>
<td>33%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Effect of Agnikarma was more observed on cardinal symptoms and effect of Trayodasanga Guggulu was significant on associated symptoms.

DISCUSSION

0 Discussion on Panchdhatu shalaka-

Panchdhatu shalaka got red hot at a temperature of 820°C, it is measured by putting the shalaka in the electric furnace. That means once it got red hot, it takes a lot of time in cooling which provides sufficient time for making samyak dagdha vrana more (20-25) in numbers at a time.

0 Probable mode of action of Agnikarma

According to ayurveda-

Sandhigata vata is caused by vitiated vata dosha with anubandha of kapha, agnikarma is considered as best therapy to pacify these vata and kapha dosha, because agni possesses usna, tikshna, sukshma, asukari guna which are opposite to vata and kapha. Due to usna, tikshna, sukshma, asukari guna it removes the srotavarodha and helps to increase the rasa-rakt samvahana to the affected joints.

Therapeutic heat transferred by agnikarma increases the dhatwagni, so metabolism at dhatu (tissue) level increases which helps to digest the ama dosha or metabolites.

According to modern science-

§ Gate control theory-

Pain sensations are transferred by two types of fibers “A” fibers (stimulated by heat, cold, and touch) “C” fibers (stimulated by pain), here the gate mechanism is blocked by stimuli from “A” fibers so the pain will not be felt.

§ Action on pain receptors-

Pain receptors are located in skin, the pathway for transmission of thermal and pain signals are parallel and terminates at same area. So out of these two sensations the strong one is felt i.e. thermal/heat sensation.

§ Counter irritation theory-

Counter irritants stimulates sensory nerve endings and relieves pain.

§ Blocking mechanism-

Agnikarma probably blocks the pathway of pain which makes the person to not feel the pain.

§ Increased metabolic activity-

Consequent heating increases cell metabolism and due to increased supply of oxygen and nutrients process of cell repair increases.

§ Increased blood supply-

Heat causes vasodilatation so the increased blood flow to the superficial tissues prompts oxygen and nutrients supply and removal of waste products.

§ Effects on muscle tissue-

Heat induces muscle relaxation.

0 Probable mode of action of trial drug-

Nirgundi and Shigru Yukta Trayodashanga Guggulu is having contents which can be divided into four categories according to their action-

1. Rasayana, Balya, Vayasthapan, Vrihama-

Aswagandha, Guduchi, Satavari, Rasna having these properties.

2. Vedanasthapana, Vatashamaka, Sulaprasahamana, Sothahara-

Guggulu, Nirgundi, Shigru, Sunthi, Yavani,
Karchura, Rasna, Vriddhadaruka and Gokshru having these properties.

3. Amapachana, Rochana, Deepana, Vatanaulomana-
Sunthi, Rasna, Satpurspa, Yavani.

4. Vishagna –

Shigru is having this property, it helps to detoxify the body by assimilating the toxic metabolites deposited in the body which are considered as a precursor for disease.

CONCLUSION

- Majority of drugs in the trial drug having vatashamaka, rasayana, balya, amapachana properties so it is a drug of choice for geriatrics.

- Significant relief in Grivasula (76%), Grivasthambha(63%), Grivagraha(62.5%) and Sirahsula(61%) were found in agnikarma group. Results in Bhrama,Cimcimayan hasta and suptata was statistically insignificant.

- Nirgundi and Shigru Yukt Trayodashanga guggulu provided good results in Grivasula(63%), Grivagraha (59%), Grivasthambha (55%), Sirahsula (69%), Cimcimayan hasta (67%). Results in Suptata and Bhrama was statistically insignificant.

- Agnikarma provides good relief in sandhigata vata (cervical spondylosis) so it can be adopt as a standard procedure for the management along with other drugs.

Need for further research-

- Well designed experimental studies are needed to evaluate the effect of agnikarma on pain.

- Further research studies are needed to focus on the exact mechanism of action of heat / agni on pathophysiology of pain.

- Further research studies are needed to design different types of shalakas along with temperature recording,temperature maintaining and temperature modulation facility.

REFERENCE-


