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To Compare The Efficacy Of *Trayodasanga Guggul* And *Mahamash Tail Matrabasti* In *Sandhigatavata* W.S.R. To Osteoarthritis.

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ABSTRACT-

Due to rapid urbanization and excessive workloads lifestyle becomes stressful and individuals suffer from various degenerative diseases. One such disease is Osteoarthritis whose prevalence ranges from 22 – 39% in India. Ageing and obesity are the major risk factors for its increased prevalence. In Ayurveda, it can be correlated with *Sandhigata vata*, a disease of *vata* origin which occurs due to *vatavardhaka ahara vihara sevana and asthidhatu kshaya*. The present study was conducted at Institute of Post Graduate Ayurvedic Education & Research, Shyamadas Vaidya Shastra Pith Hospital on 40 patients of

sandhigata vata which was divided into two groups. Group A**:** 20 patients treated with *Trayodashanga guggul* in the dose of 500mg twice daily with *dashamooladi kwath* after meal for 1 month and Group B**:** 20 patients treated with *Matrabasti* by *Mahamash taila(Niramish)* for 21 days. The result was found to be highly significant in group B as compare to group A. Group of drugs in *mahamash* tail like *Mash,Dashamula, Aswagandha,Rasana Shigru* etc along with *sneha* plays an important role in subsiding the symptoms when applied per rectum as *pakwashaya* is the main site for *vata dosha* and aggravated *vata dosh* is responsible for this disease.So it acts as a key for overcoming this disease.

Keywords: Osteoarthritis, *Sandhivata,Trayodashanga guggul, Matrabasti, Mahamash tail(Niramish).*

INTRODUCTION

Ayurveda, the ancient science of life aims to provide longevity by its preventive, promotive and curative aspects. In today's era of rapid globalization, metabolic and degenerative lifestyle disorders of connective tissue and joints are quite affluent due to consumption of incompatible diets *(viruddhahara)* and excessive workloads. During different stages of human life, disease prevalence is common due to genetic, systemic, infection, environmental, age related factors and so on. Osteoarthritis is a most common form of arthritis associated with ageing and is a major cause of pain and disability in older people. It may be defined as a condition of synovial joints characterized by focal loss of articular hyaline cartilage with proliferation of new bone and remodeling of joint contour[1]. Epidemiologically, the prevalence of osteoarthritis ranges from 22 – 39% commonly seen in females in India. It is estimated that age, sex, body weight, trauma, genetic factors plays an important role in the genesis of osteoarthritis.

In *Ayurveda,* Osteoarthritis can be correlated with *Sandhivata* which has been describes under the heading of *vatavtyadhi*. *Sandhivata* is a *vataja* disease which occurs due to *vatavardhaka ahara sevana* and *vihara* leading to *asthidhatu kshaya* and is characterized by *sandhisula* (pain), *sotha* (swelling in the joints), *prasarana akunchana pravrittischa vedana* (pain during flexion and extension of joints),

Vatapurnadritisparsha (coarse crepitus in the joints), *sphutana* (restricted movement of joints) and thus hampers the daily activities of an individual[2]. The treatment principle of *sandhivata* includes *Abhyanga, swedana, mridu samsodhana, vasti, upanaha* etc[3]. According to Charak, in *sandhigatavata* there is oedema of the joints which on palpation appears as if it is a leather bag inflated with air and pain while making efforts for extension and contraction of the joints[4]. Modern medicine reduces the pain in osteoarthritis by administration of Non Steroidal Anti-Inflammatory Drugs and analgesics which provides symptomatic relief but has its adverse effects such as G.I disturbances, renal abnormalities, dizziness, skin rashes etc on prolonged usage. Thus, a lack of satisfactory regimen in the field of health rolls back the wear and tear of the joints[5]. So, here an effort was made to treat *sandhigatavata*.

Aims & Objectives

1. To find out the efficacy of *Trayodashanga guggul* and *Matrabasti* with *Mahamash tail* in the management of *Sandhigatavata*[6].

2. To compare the effect of the drug and *matrabasti* clinically.

3. To find out cheap, effective remedial measure with minimal side effects for the disease.

MATERIALS & METHODS

Total forty patients of s*andhigatavata* fulfilling the selection criteria were registered for the study from the OPD and IPD of *Kayachikitsa*, Institute of Post Graduate Ayurvedic Education & Research, Shyamadas Vaidya Shastra Pith Hospital, Kolkata – 700009 after taking written informed consent from the patient.

Inclusion Criteria

1. Patients of either sexes between 35 – 70 years.

2. Patients presenting with clinical sign and symptoms i.e. *sandhisula* (pain), *sotha* (swelling of joints), *stambha* (stiffness), *sphutana* (restricted movement), *akunchana prasarana vedana* (pain during flexion and extension of the joint), *Vatapurnadritisparsha* (coarse crepitus in the joints) etc.

3. Patients with osteophyte formation[7].

4. Patients with reduced joint space[8].

Exclusion Criteria

1. Patients having history of rheumatoid arthritis, gouty arthritis etc.

2. Patients having history of uncontrolled diabetes mellitus.

3. Patients having history of hypertension, heart disease and other systemic diseases.

4. Patients having history of pregnancy and lactation.

5. Patients associated with other concomitant diseases.

Grouping of Patients

The patients were randomly selected and divided into two groups with twenty patients in each group :

Group A – Twenty patients were treated with *Trayodashanga guggul* in the dose of 500mg twice daily after food with 10ml *dashamoola kwath* as *anupan* for1month.

Group B – Twenty patients were treated with *Matrabasti* by *Mahamash tail* (*Niramish)* in a dose of 60ml for 21days.

Follow Up: The patients were followed at an interval of fifteen days.

Assessment Parameter:

The patients were assessed on the basis of relief of sign and symptoms and a scoring pattern was aligned following Visual Analogue Scale.

Subjective Parameter:

1. Pain in the knee joint.

2. Stiffness of knee joint.

3. Swelling of knee joint.

4. Walking time.

5. Range of movement.

Statistical Analysis:

Student paired‘t’ test has been adopted for the assessment of the drug therapy[9].

OBSERVATIONS & RESULTS

Demographic study reveals that maximum patients i.e.70 % were in 50 – 60 years age group,70 % were female, 60% were housewives, 85% were belonging to middle socio – economic status,40% patients was having *visamagni*, and in 60% cases bowel habit was constipated in nature. Further effects of therapy on various parameter are presented in Table – 1 & Table – 2.

Table – 1: Effect of Trayodashanga guggul in Group A patients of Sandhigatavata

Cardinal Features	Mean BT	Mean AT	Percentage of Relief	SD	SE	't' test	P value
Sandhisula	3.5	2.95	15.71%	1.35	0.30	1.83	< 0.05
Sandhisotha	3.8	2.4	36.84%	0.47	0.11	4.68	< 0.001
Sandhisphutana	2.1	0.7	66%	0.78	0.29	2.84	< 0.10
Sandhigraha	2.5	1.7	32%	0.78	0.29	2.65	< 0.10
Sparsha-asahatwa	1.14	0.28	75.43%	0.69	0.26	3.29	< 0.05
Akunchana Prasarana Vedana	1.79	0.71	60.96%	0.90	0.34	3.75	< 0.05

* SD = Standard Deviation, SE = Standard Error, P value = Level of Significance[9].

Table – 2: Effect of Matrabasti by Mahamash tail in Group B patients of Sandhigatavata

Cardinal Features	Mean BT	Mean AT	Percentage of Relief	SD	SE	't' test	P value
Sandhisula	3.5	1.7	52.4%	0.83	0.15	11.84	< 0.001
Sandhisotha	2.8	1.2	57.2%	0.89	0.10	9.82	< 0.001
Sandhisphutana	3.3	1.3	60.6%	0.87	0.16	13.10	< 0.001
Sandhigraha	3.2	1.5	53.1%	0.84	0.15	11.11	< 0.001
Sparsha-asahatwa	2.14	0.85	60.28%	0.75	0.28	4.51	< 0.001
Akunchana Prasarana Vedana	2.8	1.4	50%	1.01	0.18	7.57	< 0.001

*SD = Standard Deviation, SE = Standard Error, P value = Level of Significance.

DISCUSSION

Among the diseases of locomotor system, osteoarthritis is the most common painful condition which causes wear and tear of the joints and leads to disability. It is a degenerative, inflammatory disorder which causes pain, swelling and restricted movements of joints. On movement, excruciating pain occurs which becomes unbearable even on mild touch and results in the formation of crepitus. *Mahamash tail (niramisa)* contain ingredients such as *Masa, Dashamula kwath, Aswagandha, Rasna,PunarnavaSatapuspa,Citraka* etc which possess *sothahara, balya* etc property which reduces swelling and provides strength to the joints[10]. It has anti inflammatory, immunological and *rasayana* property which prevents the recurrence of disease and also eliminates the toxins from the body which prevents the formation of *ama*.The *snigdha guna* of taila antagonizes the *rukshata* of *vayu* and *tikshna* guna removes the *srotodushti* due to *sanga*. Thus *matravasti* directly pacifies *apana vayu* and

restores the equilibrium of *agni* which controls both *samana* and *prana vayu*[11].

Probable mode of action

***Trayodashanga guggul*- It contains**

Abha,Aswagandha,Hapusa,Guduchi,Satavari,Goksura,Vrddhadaraka,Rasna,Satapuspa ,Sati,Yavani and Sunthi which has properties of *sothahara, balya, rasayan, vedanasthapan,deepan* etc. Its pharmacological activities include anti inflammatory, analgesic, anti oxidant etc[12]. By these properties, this drug is beneficial for the remission of *sandhigatavata* to an extend.

***Matrabasti by Mahamash* tail-** *Basti* is the best treatment for *vata* as said by Acharya Charaka "*Bastihi Vataharanam*". *Basti* drug reaches to the *Pakwashaya*(large intestine).It is the main seat for *Vata dosh* as earlier said. *Pakwashaya* is the site of *Purishadharakala*. Acharya Dalhan in his commentary said *purishadhara* and *Asthidhara kala* are one and same. Acharya Sushruta mention 8th basti nourishes *Asthi dhatu*. Thus through *basti*, we can achieve the *shaman* and *snehan* of *Asthidhatu*[13]. *Mahamash tail* has also *sothahara, balya, vedanasthapan,deepan, rasayan* as well as *brimhan* properties which helps in remission of this disease. It also used in *pakshwaghat, grivagraha,ardita* and muscular dystrophy[14].

CONCLUSION

Marked improvement was found in both groups but maximum remission and highly significant result was found in group-B. *Matrabasti* by *Mahamash tail* possess the therapeutic potential in mitigating the pain, stiffness, swelling of joints and is effective in decreasing the restricted movement of joints compare to oral administration of *Trayodashanga guggul*. Further no any adverse effect of *Matravasti* was seen. Hence, it can be concluded that *Matravasti* with *Mahamash taila* is effective in the management of *Sandhigatavata*. Along with present therapy, *sthaulyahara* treatment in sthula patients and exercise of the joints may help in improving joint function.

LIMITATIONS

- The study population was small.
- The study period was short.
- Hence extensive and large scale studies are suggested.

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