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Guggulu preparations: Gold standards in the management of Joint disorders

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ABSTRACT

Joint disorders are most common cause in human beings that result physical and mental disabilities. They have multiple etiology and pathogenesis according to both modern and ancient medicine. In ayurveda joint diseases discussed under certain *vatavyadhis, ama dosha janya, dushit rakta janya* and *asthi-sandhigat* rogas. Charaka has mentioned *Pakshāghāt, Arditavat, Gridhrisi, Sandhivāta, Khalli* etc. under the *vata vyadhis* while Sushruta has also included *Vatarakta* in *vatavyadhi. Amavata* is not a direct *vatavyadhi* it is caused due to *ama dosha* and vitiated *vata. Shodhan* and *shaman* both are described for the treatment of joint disorders. Among *shaman chikitsa, Guggulu* preparations are the main drugs being used for *Sandhigat roga chikitsa*. It is being widely used due to its analgesic & anti-inflammatory properties. Different *guggulu* preparations are used in different joint disorders depending upon their composition and etiopathogenesis of particular problem.

Keywords: Sandhivata, Vatarakta, Guggulu, Anupana, Amavata, Charaka Samhita, Susruta Samhita, Shārangdhar Samhita, Vata, Pitta, Kapha, Prakshepa dravya.



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INTRODUCTION

*Sāmānyaj vikaras*¹, occurring due to vitiation of two or more *doshas* and *Nānātmaj vikaras*², occurring due to the vitiation of a single *dosha* are two major categories of diseases commonly practiced in ayurveda. There are so many definitions can be quoted regarding *vata vyadhis*³. Best one and most acceptable definition may be like "the diseases caused due to *vikrat vata* i.e. abnormal *vata dosha* are *vata vyadhis*." Joint disorders are important component of *vata vyadhis* & other systemic diseases. Physical and mental disabilities are inter-related most of the times. Sometimes prolong sufferings of arthritis isolates people from rest of person leading to psychological problem like depression whereas prolong anxiety and related conditions may result in excessive free radical generated tissue injury leading to joint troubles. Common reasons behind joint disorders *or vata vyadhis* may be-

1) Āhār vihār janya 2) Dhātu kshaya janya 3) Āvarana janya

According to modern medical science common joint disorders are Rheumatoid arthritis, Rheumatic arthritis, Gouty arthritis, Osteo-arthritis, Cervical spondylitis, Lumber spondylosis, Ankylosing sponylosis, Frozen shoulder etc. The etiology behind them may be autoimmunity, infection, hyperuricaemia, cartilage destruction, altered bone and calcium metabolism etc. In ayurvedic system of medicine they are very closely related with *amavata*, *vatarakta, sandhigat vata, manyastambh, kativata, avabahuka* respectively. Besides many other factors, the concept of *āvarana* looks to be more responsible for causing joint disorders. Acharya Sushruta has also included *Vatarakta in vatavyadhi;* where in addition to *vata, pitta* and *rakta* are also gets vitiated. While in *Āmavata*; along with *vata, kapha* and *āmadosha* are equally important in etiopathogenesis.

The treatment can be divided grossly into two parts:-

1) Shodhan- Snehan, swedan, āsthāpan and anuvāsan basti, virechana

2) Shaman- Vatashāmak /corrective rasa, churna, kwatha, taila, āsava-arishta, guggulu etc. In this paper we are emphasizing mainly different guggulu preparations used in joint disorders. Because the Guggulu are the most important one among various Ayurvedic medicines that have been used frequently in Vatavyadhi chikitsa. Now a day it's being widely used due to its analgesic & anti-inflammatory properties. Many studies have shown the effectiveness of guggulu for the reduction of pain, stiffness, inflammation and other symptoms present in different joint disorders besides having additional benefits like weight reduction, anti hyper lipidemic²² etc. Different guggulu preparations are used in different vatavyadhi and sandhigat rogas depending on etiopathogenesis of disease and composition of guggulu preparation. In all guggulu preparations main content is resinous material guggulu which is obtained from the plant Commiphora mukul. Firstly it is purified by specific methods than certain herbal and mineral drugs are added to it according to disease indications. In this context we can consider mainly and commonly occurring joint problems like *Āmavata* (Rheumatoid and Rheumatic arthritis), *Vatarakta* (Gouty arthritis), *Sandhigat vata* (Osteoarthritis), *Manyastambha* (Cervical spondylitis), *Avabahuk* (Frozen shoulder), *Gradhrasi* (Sciatica), *Kroshtuksheersha* (Synovitis of knee joint) etc. Most common *guggulu* preparations which are used frequently can be described as follow:

MAHAYOGRAJ & YOGRAJ GUGGULU⁴

Main contents of these guggulus are Triphala, Guggulu, Shunthi, Pippali, Pippalimul, Chavya, Chitrak, Hingu, Ajmoda, Jirak dway, Renuka, Indrayava, Pāthā, Vidang, Katuka, Ativisha, Vacha, Devdaru, Vrihat ela, Saindhava, Kushtha, Rasna, Gokshura seeds, Dhania, Nagar motha, Marich, Dalchini, Khas, Yavakshār, Tālisha patra, Tejpatra, Vanga bhasma, Roupya bhasma, Nāga bhasma, Lauh bhasma, Abhrak bhasm, Mandur & Rasa sindur (when it is prepared without the use of above mentioned bhasmas, it is called Yogarāj guggulu) Uses:

Though both of these preparations are mentioned under $\bar{A}mavata rogadhikar$ by \bar{A} charya Shārandhar but on the basis of their contents and by using different $kw\bar{a}th$ (decoction) as anupān (carrier) they can be used in many diseases. For example in general vatavyadhi it can be used along with the decoction of $R\bar{a}sn\bar{a}$, Errand mul, Dashamula etc. whereas in Vatarakta Guduchi or Manjisthādi kwath is used as anupān, in Medovridhi i.e. obesity with honey, with Gomutra i.e. cow urine in Pandu and with Triphalā kwath in Netra roga etc. In case of avabāhuka and sandhigat vata; mahāyograj guggulu with mahārasnadi kwath is found to be very effective. Clinical trials are evident of its efficacy in cases of osteo-arthritis 26

TRAY<mark>ODASHANG</mark> GUGGULU⁵

Main contents of this guggulu preparation are *Abhā (babul), Ashwagandhā, Hapushā, Guduchi, Shātāvari, Gokshura, Rāsnā, Shyāmā, Shati, Yavāni, Shatāvah, Shunthi* all in equal parts, *Guggulu* being the main ingredient is taken in 12 parts.

Uses:

Trayodashāng guggulu is being widely used in *Sandhivāta* which is correlated with Osteoarthritis according to modern medicine. Where main pathology is destruction of bone cartilage leading to rubbing together of two bones causing severe pain and swelling in affected joint. *Sandhivāta* is a degenerative disease which occurs due to blockage of freely moving *vata* in the joints which causes pain and swelling. *Rāsnā* (Pluchea lanceolata) present in *trayodashāng guggulu*, pacifies the *vata* as Ācharya Charaka has stated *rāsnā* as *vataharanām, shunthi* (Zingiber officinale) being *ushna virya* also pacifies the *vata, guggulu*

acts as analgesic and anti- inflammatory drug while *ashwagandhā* (Withania somnifera), *shatāvari* (Asparagus racemosus), *guduchi* (Tinospora cordifolia) are the *rasāyan dravya* present in the preparation which can check the degenerative process going on, by providing nutrition to bones and joints. *Guduchi* ¹⁴ has additional anti oxidant and immune modulating property helps curing the underlying pathology. Researches have shown its markable results in the patients of osteoarthritis ²⁴.

PANCHAMRIT LAUH GUGGULU⁶

Main contents of this guggulu are *Pārad*, Gandhak, bhasma of Rajat, Swarnamākshika, Abhrak and Lauha, Shuddha guggulu.

Uses:

Manyāstambh is a *vatavyadhi* in which *vata* is vitiated in *manyā pradesh* (neck region) due to *āvarana* of *kapha*. In modern medicine it is correlated with cervical spondylosis where formation of osteophytes and fusion of spines occur that causes both pain and stiffness of the neck beside giddiness and headache. *Panchāmrita lauha guggulu* is specially preferred over other *guggulu* preparation in *manyāstambh* as it is specifically mention in *mastishka sambhav*, *snāyu* and *vataja roga*²³. It is found to be very effective in non compressive cervical spondylitis.

KAISHORE GUGGULU⁷

Main contents of this guggulu preparation are Amritā (guduchi), Āmalaki, Vibhitaki, Haritaki, Guggulu in equal quantity. Vidanga, Trikatu, Danti, Nishoth, Guduchi as prakshep dravya. Uses:

Vatarakta is a disease in which both the *vata* and *rakta* are vitiated. It is of two types-*uttāna* & *gambhir*. In *uttāna vatarakta* skin related symptoms like itching, burning sensation, skin discoloration, pain etc. are present while in *gambhir vatarakta* joints are mainly affected. In modern parameter the *gambhir vatarakta* can be co-related to Gout in which due to abnormal metabolism of purine, uric acid concentration is increased in the body. That leads to deposition of crystals of sodium biurate in joints and other body parts, leading to specific pattern of pain in joints. Both the *guduchi* and *triphalā* present in *kaishore guggulu* are *tridosh shāmak*, specially *guduchi* being *tikta rasa, madhur vipāka* pacifies the aggravated *pitta* and *rakta*, and by its *ushna virya* property it pacifies the aggravated *vata. Guggulu* is helpful in relieving both pain and inflammation of joints. *Guduchi* also helps to expel out raised uric acid from blood. *Kaishore guggulu* has been reported to posses effective role in *vatarakta* i.e. Gouty arthritis²⁵.

AMRITA GUGGULU⁸

Main contents of this guggulu are Guduchi, Āmalaki, Vibhitaki, Haritaki & Guggulu. Danti, Nishoth, Trikatu, Triphalā, Guduchi, Vidanga, Twak as prakshepa dravya.

Uses: - By the virtue of its contents it is very effective in *Vatarakta*²⁵, *kushta, dushta vrina* and all the *rakta vikāras*. Both the *kaishore guggulu* and *amritādi guggulu* are more effective when given with *Manjisthādi kwath* as *anupan*.

SINGHNAD GUGGULU⁹

Main contents of this *guggulu* are *Āmalaki*, *Haritaki*, *Vibhitaki*, *Gandhak*, *Shudhha Guggulu* 50 gram each and *Eranda taila* 200 ml.

Uses:

Though *Amavata* is not a direct *vatavyadhi*, it is caused due to *ama dosha* (toxins present in the body due to undigested food or poor digestion) and vitiated *vata*. Symptoms of *āma* like *angamard* (malaise), *aruchi, trishnā, ālasya, gaurav, jwar* are present in *āmavata* along with the symptoms of vitiated *vata* like *sandhi shool*. Mainly the small joints of body are affected in *āmavata*. Because of the involvement of *vata* it is usually described along with the other *vata vyadhi* like *sandhivata* and *vatarakta*. In modern parameter it can be co-related with Rheumatoid arthritis which is an auto immune disorder.

Singhnāda guggulu contains medicinal herbs which improves digestive power and reduces production of kapha. Triphala helps to cure digestive problem and helps in elimination of toxins. Erand taila (castor oil) is specific for āmavata as it is virechak i.e. purgative in addition to pacification of vata by action, while other virechak drugs cause vata prakopa. Therefore it is highly effective in $\bar{A}mavata$ chikitsa. $\bar{A}malaki$ (Emblica officinalis) ¹⁵ is a proved immune modulator drug thereby helps in correcting autoimmunity. This guggulu is also indicated in smaller paralytic vata vyadhis like khanja and pangu. Many studies have proved its effective role in $\bar{A}mavata$ i.e. Rheumatoid arthritis. ^{19,20}

AAMVATARI RASA (AAMVATARI GUGGULU)¹⁰

It is very similar to *Āmvatāri rasa* described in *āmavata chikitsa*. Main contents of this guggulu are Pārada, Gandhak, Triphala, Chitrak, Guggulu, Eranda taila.

Uses:

As the name suggest $\bar{a}mvatari guggulu$ is very effective in $\bar{A}mavata$. It pacifies both the *ama* and *vata* by virtue of its contents specially *erand taila*. Certain studies has been performed to assess its results by the name of *vatāri* guggulu²¹

PUNARNAVADI GUGGULU¹¹

Main contents of this guggulu are Punarnavā, Deodar, Haritaki, Guduchi, Guggulu, Gomutra.

Uses:

Because of the diuretic property of *punarnavā*¹⁶ and *tikshna guna* of *gomutra punarnavādi guggulu* is very effective in *shotha* i.e. edema, *jalodar* i.e. ascites, diseases of *basti pradesh* etc. Now a day it is used as anti obesity drug also as the *guggulu* itself has proved anti obesity ¹⁸ actions,, which is helpful in management of *vata vyadhi* and other arthropathy as in many conditions along with pain, swelling also present that can be relieved by its diuretic action. Further it can reduce body weight which is highly required in the patients of **osteoarthritis.**

For better result it should be used with *Punarnavādi or Punarnavāshtaka kwath* as *anupan dravya*. *Punarnāva* (Boerhavia diffusa) is reported to have regenerative effect on kidneys²⁸. Therefore it may recover the kidneys from damage which may be caused by prolong raised uric acid, high blood sugar and other causes.

GOKSHURADI GUGGULU¹²

Main contents of this guggulu preparation are Gokshura, Guggulu, Shunthi, Marich, Pippali, Āmalaki, Vibhitaki, Haritaki and Nāgarmotha.

Uses: - *Gokshura* (Tribulus terrestris)¹⁷ is a strong diuretic herb. Āchārya Shārangdhar has mentioned that in its therapeutic uses it cures *prameha, mutrakriccha, mutrāghāt, vātarakta, vatavyadhi, ashmari* and *shukra roga*. In *Vatarakta* it is useful because it promotes the excretion of excess uric acid from the body due to its diuretic property. It is very effective in *ashmari roga* also, especially when taken with *varunādi kwath* as *anupāna*.

RASNADI GUDIKA (RASNADI GUGGULU)¹³

Main contents of this *guggulu* are *Rāsnā* and *Guggulu*. Uses:

As already mentioned $r\bar{a}sn\bar{a}$ is best among the *vatahara dravya*, therefore $r\bar{a}sn\bar{a}di$ guggulu can be used in all *vata vyadhi* especially in *amavata*²¹. $\bar{A}ch\bar{a}rya$ Yogaratn $\bar{a}kar$ has described it in gradhrasi chikits \bar{a} adhy $\bar{a}ya$.

Over weight is an important predisposing as well as aggravating factor in the pathogenesis of certain joint disorders specially osteoarthritis. If we can prevent weight gain or reduce the already gained weight by certain herbal medications or other modes, it will definitely prevent the occurrence and progression of those joint disorders. *Guggulu* itself is one of the *ayurvedic* remedy which can be used for this purpose along with other drugs. It is well proved that guggulu helps in weight reduction along with anti-inflammatory and analgesic property. In this way *guggulu* preparations are helpful in symptoms relief and weight reduction both.

CONCLUSION

In this way we see that *guggulu* preparations work in so many directions of joint disorders. Some are working to correct auto immunity in Rheumatoid arthritis, some are helping to excrete uric acid from body, one can provide help to repair the destructed cartilage and some can provide neurological support to cure related joint disease. Certain *guggulu* preparations can help to keep away etiological factors that may cause arthritis in future or by adding them to main therapy we can get better and early results. Some *guggulu* preparations provide help to reduce associated symptoms in arthritis. Therefore we can say that *guggulu* preparations are very effective and highly useful and gold standards in the management of joint disorders. Main attention has to be taken regarding their preparation that must be of best quality especially the *guggulu* must have been purified well by prescribed methods. Otherwise instead of providing relief it may cause so many side effects such as gastric upsets etc. The binding material should be of best quality and must be added in optimum quantity so that the tablet may be disintegrated easily rather than passing unabsorbed with stool. Keeping all measures in mind we advice taking any *guggulu* preparation always after meal. While selecting particular *guggulu* preparation its composition must be analyzed and prescribed carriers i.e. *anupan* and *sahpan* should always be considered for satisfactory results.

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