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ANGAMARDAPRASHAMANA MAHAKASHAYA: CRITICAL ANALYSIS AND EFFICACY IN MANAGEMENT OF KATIGRAHA (LUMBAR SPONDYLOSIS)

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ABSTRACT

Ayurveda emphasize more on preventive and health promotive aspect than curative aspects. Acharya Charaka in charaka- samhita explained 50 number of mahakashaya in 4th chapter of sutrasthana namely Shadvirechaneeya Shatashretiya adhyaya. Each mahakashaya have 10 number of drugs respectively. Among them Angamardaprashamana mahakashaya is the 44th number of mahakashaya which have quality to reduce muscular as well as bony pain of body and also have restorative capacity. Lumbar spondylosis is the degenerative conditions of lumbar vertebra along with intervertebral disc which leads to hamper on physiological work of ligaments, nerves, and muscles attached to it and cause pain which is compared with the *Katigraha* which is one of the 80 types of vataja nanatmaja vatavyadhi or we can say *dhatukshaya janya* (degenerative) vatavyadhi complaining of symptom like *katishoola, Stambha.* So According to charaka Angamarda prashamana mahakashaya have the efficacy to reduce the body pain, stiffness, loss of sensation as well as to restore and to stop the degenerative condition of the lumbar spondylosis. From the analysis of rasa, guna, veerya, vipaka and dosha karma of the ten drugs, they have property to pacify pain and stiffness of the lumbar spondylosis.

KEYWORDS: *Angamardaprashamana mahakashaya, Lumbar spondylosis, Katigraha.*

INTRODUCTION

Charaka samhita is an ancient Ayurvedic text of old literature of Ayurveda explaining various complicated diseases including Vatavyadhi and various herbs, formulated drugs and therapy for the management of it.

Angamarda prashamana mahakashaya includes the drugs named Vidarigandha. Prishniparni, Kantakari, Brihati, Eranda, Kakoli, Usheera, Yastimadhu, Ela, and Chandan.[1] These drugs have the properties to relive the paint and stiffness and then to stop or restore the degenerative process of lumbar vertebra and lumbar intervertebral disc.

Katigraha is a *vataja nanantmaja* disease described by Sharangadhar in Sharagadhar Samhita.[2] and by Shodala in Gadanigraha that vata get vitiated in kati Pradesha (lumbar region) a and give symptoms like *graha, shula* and later can lead to *pangu (*disable).[3] In Katigraha there will be *Stambha, Ruja* so we can easily go through the Acharya Charaka as he mentioned that vayu is the cause for different type of pain in the body, when the normal physiological action is detailed by specific causative factor concerned.[4] Also Charaka has specified in Siddhisthana that whatever the pain experienced in body are being caused by vayu. The symptoms of the lumbar spondylosis is same as the symptoms of vitiated vata hence it is a vataja diseases.

AIM AND OBJECTIVE

1. To study the effects of Angamardaprashamana Mahakashaya in the management of lumbar spondylosis.
2. To compile the references from various samhita and Ayurveda pharmacopeia or nighantu in which the drugs are described along with their *doshaghna karma, rasa guna, veerya, vipaka* and *pravav* for Katigraha.

Drug review

Vidarigandha (*Desmodium gangeticum*)

Its rasa is *madhura, tikta* and *guru, snigdha guna* along with *Ushna veerya* and *madhura* vipaka. It have tridoshashamak and *Rasayanna* (Rejuvenative) action.

Charaka has included Angamardaprashamana along with *shothahara* qualities probably due to anti-inflammatory property. Apart from this Sushruta has also described its therapeutic use in *hridaya shula* (Angina) and as pain relieving agent in *vatarakta* (Gout).

So far modern experimental studies are concerned the antinociceptive, anti-inflammatory study have been done on its water decoction of root, which was found effective in experimental animals. In the pharmacological profile of *Desmodium gangeticum* was studied in which significant result found with anti-inflammatory and analgesic effect of its water decoction of root and aerial part along with antinociceptive action also. Moreover, in another study its effect was studied on smooth muscle, was found having anti inflammatory activities in albino rats.[5'6]

Prishnparni (*Uraria picta)*

It has *shothahara* qualities (Anti-inflammatory) mentioned by Charaka. Susruta has grouped in vidarigandhadigana and haridradigana which is accepted by Vagbhata and Its rasa is *madhura* and *tikta, Guna* is *snigdha* with *ushna veerya* and *madhur vipaka* as per Ayurvedic pharmacopoeia. It also having *tridoshashamak* and deepaniya qualities..

It was also verified from chemico-pharamacological experiments to verify its antinociceptive or analgesic effect; it was found that a study has been conducted on laghupanchmula in which *Uraria picta* was one of component having analgesic-hypnotic activity observed in rats, It denotes the administration of laghupanchamula decoction is highly potent in relieving pain due to sedative property which is corroborated with the neuro-muscular disorders.[7]

Brihati (*Solanum indicum*)

It is also a component of laghupanchamula and apart from this Charaka has mentioned the property as shothahara (Anti inflammatory). It is having *katu, tikta rasa, ruksha guna, ushna veerya* and *katu vipaka* as per Ayurvedic pharmacopeia. It also aving *kapha vata shamak* properties and *deepan pachaneeya* quality.

The antinociceptive and analgesic effect *Solanum indicum* was verified through phytochemical and pharmacological studies in which it was statistically found significant in a study as an analgesic Experimental evidences shows that *Solanum indicum* fruit extract possesses analgesic and anti-inflammatory effect. In the study the central analgesic activity was determined in rats, which were treated with the extract of the drug along with control drug aspirin in which drug was found having analgesic activity more in comparison to control drug, in the above experimental study the conclusion was drawn that the fruit extract of *Solanum indicum* indeed possesses analgesic effect and CNS depressant activity as depicted

in animal study. It denotes its specific analgesic effect with anti-inflammatory action required for neural pain along with neuro muscular management.[8]

Kantakari (*Solanum xanthocarpum)*

It is also a component of laghupanchamula, As per Ayurvedic pharmacopeia it has *katu* and *tikta rasa* with *Tikshna* and *ruksha Guna, ushna veerya, katu vipaka.* Charaka has more specified with its diversified actions as *shothahara* (anti-inflammatory). It is also having *kapha vata shamak* properties and *deepan pachaneeya* quality.

In reviewed experimental and pharmacological studies, it was found That the methanolic extract of Solanum xanthocarpum arial parts given orally showed significant antinociceptive activity.[9]

Eranda (*Ricinus communis*)

Qualities mentioned by Charaka apart from its root as vata hara (Neurotropic). Eranda possesses *katu, madhura rasa, snigdha guna, ushna veerya* and *madhura vipaka* as per Ayurvedic pharmacopeia.

Mostly the root, seed /oil are used for medicinal purpose in vatavyadhi (Neurological disorder), katishula (Lumbago) due to pain as important symptom. The drug was also verified through experimental phyto-chemical studies done earlier to find out its antinociceptive and analgesic effect. The Compound ricinolic acid, the main component of castor oil showed remarkable analgesic and anti-inflammatory effect in a study which corroborates vedanathapana qualities as mentioned by Charaka. It provides an analgesic effect similar to NSAID's and can be considered to be used in neuro-muscular and inflammatory conditions.[10]

Chandana (*Santalum album*)

As per Ayurvedic pharmacopeia it is having *tikta* and *madhur rasa laghu, Ruksha* in *guna* with *sheeta veerya* and *katu vipaka* as per Ayurvedic Pharmacopeia. It also having *kaphapitta hara and vedanastapak (*painfull to painless condition) and *dahaprashamana* properties.

It was verified from an experimental study that it possesses antioxidant, analgesic and anti-inflammatory activity especially the methanolic extract of wood was screened for analgesic and anti inflammatory activity with various dosages and compared with diclofenac sodium as

saturated which showed maximum result compared with control group and was statistically significant.[11]

Moreover, the drug was also studied on CNS with analgesic activity using hot-plate analgesia meter in comparison with standard diazepam and pentazocine as standard drug. It was concluded in the study that Santalum album had more prominent 14 CNS effect for analgesia and sedation.[12] Similarly the sedative effect of sandalwood oil was also studied on albino mice in another study which has found encouraging result. From the above experimental studies it is apprehended that Santalum album contains muscle relaxant effect" probably corroborating to angamarda prashamana qualities described by Charaka. Moreover the wood of the plant as pain killing property for fever, headache and inflammation in Ayurvedic classic and result so found is identical to pain management sequences.

Usheera (*Vetiveria zizanoides*)

It has *Tikta* and *Madura Rasa* with *laghu, Ruksha Guna ,sheeta veerya* and *katu vipaka* according to Ayurvedic Pharmacopeia. It also having *kaphapitta hara and vedanastapak* and *dahaprashamana* properties.

The ethanolic extract of Vetiveria zizanioides in different doses produced significant in habitation of pain response and caused the analgesic and anti-inflammatory activities.[13] In an another study Vetiveria popularly known as khaskhas grass was taken for study for its analgesic and anti-inflammatory action. However in several studies it was found having promissory source of anti inflammatory and analgesic effect.

Ela (*Elettaria cardamom*)

According to Ayurvedic pharmacopeia it is having *katu* and *madhur rasa laghu, ruksha guna, sheeta veerya* with *katu vipaka.* It also having kapha vata shamak properties and deepan pachaneeya quality.

An investigation of an analgesic activity of oil extracted from Elletaria cardamom seeds proved the antinociceptive action.[14]

Yasthimadhu (*Glycyrrhiza glabra*)

This is an important drug told as medhya by Charaka. According to ayurvedic pharmacopeia It is having *Madhura rasa, guru* and *snigdha guna, sheeta veerya madhura vipaka* and have action tridoshashamak and Rasayana.

Glycyrrhizin showed antiarthritic and anti inflammatory effect on formaldehyde induced rat paw oedema in adrenalectomized rats. It was found to potentiate the anti arthritic action of hydrocortisone in rats.[15]

Kakoli (*Roscea procera*)

It has been taken as one of the component of Angamardaprashamana group still stands as a controversial drug and not still clear and identifiable in parallel with modern to taxonomy due to lack of its identity in Ayurveda. Kakoli is *sheeta* in *veerya* having *guru* and *madhura guna* as per as per Bhavaprakash nighantu. It as *vatashmak* and *balya* (nourishing), *dahanashak*, property.[16] In this reference it is to mention here that Kakoli is being identified as *Roscoea procera* and Fritillaria roylei in different places; since due to lack of identification the evaluation done in any case could not be matched.

DISCUSSION

As per Shodala *Katigraha* is a vataja Disease where the kati asrita vayu (vayu reside in lumbar reagion) get vitiated alone/with sama and gives symptoms of katigraha like shula graha etc. considering the *dosha* dominance of Angamardaprashamana Mahakashaya maximum drugs are *vatashamak*; where vidarigandha and madhuka are *tridosha shamak* as well as *rasayana*, Prishniparni also *tridoshashamak* and having *deepaniya* quality, Brihati, Kantakari and Ela having *kapha vata shamak* properties and *deepan pachaneeya* quality. Chandan and Usheera having *kaphapitta hara* properties also have *vedanastapak* (painfull to painless condition) and *dahaprashamana* (burning sensation pacifying) qualities and Kakoli is pure *vata shamak* properties. From this analysis all the drugs strengthen the idea of restorative and analgesic properties of Angamardaprashamana mahakashaya and can used all of them in disease condition together which will pacify the symptoms of lumbar spondylosis like degeneration of bone, disc, ligaments, pain, stiffness, neuropathic pain, burning sensation, difficulties in flexion and extension of hip.

CONCLUSION

From the above analysis, it is evident that Acharya Charaka- has correctly described the herbal drugs in a qualitative manner to combats particular disorder. The herbal agents of Angamardaprashamana mahakashaya has shown analgesic, neuroprotection, restorative properties so these drugs can be used in *Katigraha* (Lumbar spondylosis) which possesses symptoms like stambha and ruja.

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