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Review Article

### Ayurveda *Kayachikitsa* towards the management of joint pain: a review

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#### ABSTRACT

Joint pain is one of the very common problems amongst the elderly age population. Clinically it is characterized by *shula*, *shotha* and *prasaarana-aakunchanayo pravruttscha vedana*. Ayurveda described various treatment modalities for the management of joint pain such as; *snehana*, *swedan*, *upanaha*, *lepa* and herbal medicine. *Kayachikitsa* is branch which deal with use of ayurveda drugs for the management of various diseases. This branch also recommended use of different natural medicine for the treatment of joint pain. *Guggulu* (*Comiphora mukul*) is most common drug used in *Amavata*; disease of joint pain. Similarly various herbal formulation of *Ashwagandha*, *Rasna*, *Sunthi*, *Pippali*, *Gokshura* and *Trivrut* are also recommended in diseases of joint pain. Present article summarized role of herbal medicine in joint pain.

**Keywords:** *Ayurveda*, *Kayachikitsa*, *Joint Pain*, *Shula*, *Vedana*.

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#### INTRODUCTION

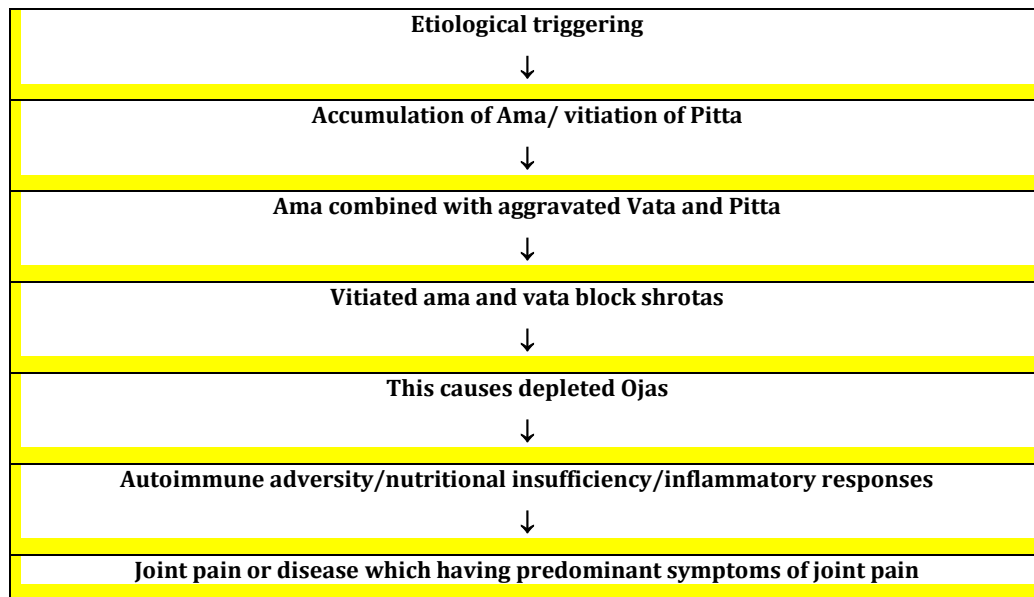
Rheumatic arthritis (*Ama Vata*) and osteoarthritis (*Sandhigat Vata*) are the diseases which involve severe joint pain due to the cartilage destruction and inflammation. The vitiated *pitta* results joint inflammation while aggravated *vata* plays important role in overall cascade of joint pain. The malnutrition, injury, infection, congenital reasons and ageing etc. are some etiological factors associated with joint pain. As per ayurveda when *Agni* not working properly then toxins or *ama* produced which accumulate along with vitiated *vata*, this further leads *Ama Vata*<sup>1-4</sup>. Consumption of excessively cold, dry, bitter and pungent foods, irregular pattern of life style, excessive travelling, stress, lack of sleep, traumatic event and genetic factors may be considered responsible for *Vata* aggravation. The aggravated *Vata* along with *Ama* move into the *shrotas* and affect most vulnerable part of body such as; joints. This cascade resulted deterioration of the soft tissues in the joints and bones. Similarly aggravated *Ama* block channels and reduces supply of nutrients to the

joints leads to malnutrition, these all together resulted joint inflammation, stiffness, swelling and pain<sup>3-6</sup>.

Ayurveda the natural way of treatment recommended many traditional herbal formulations for the management of diseases related to joint pain. These drugs help to reduce inflammation, swelling, tenderness and stiffness of joint. The herbal medicine also possesses ability to pacify aggravated *Vata* and *ama*. Ayurveda also suggested some *rasayana* formulation to nourish joint tissues and *Ojas*. The ayurveda medicine not only helps to pacify *ama* & *doshas* but also boost functioning of *agni* hence thus reduces joint pain in early stages.

In joint *vyana vayu* is considered responsible for joint motion while *apana vayu* is responsible for health of bones. Therefore we can say that disturbed motion is a function of *vyana vayu* while joint damage is related to *apana* vitiation. *Sleshaka kapha* also considered responsible for synovial fluids; vitiation of *sleshaka* resulted excess fluid and thus swelling in the joint<sup>4-8</sup>.

## Samprapti



## CHIKITSA OF JOINT PAIN AS PER AYURVEDA

The basic line of treatment involves balancing of vitiated factors such as; normalizing *agni*, *ama* and *vata*. Herbs which possess analgesics and anti-inflammatory properties are used most commonly in the management of diseases related to joint pain<sup>5-7</sup>. The basic line of treatment for diseases related to joint pain such as; *amavata* includes *langhanam*, *swedanam*, *tiktam*, *deepana*, *katu* drugs and *sodhana* procedure<sup>7-10</sup>:

- Formulation such as *Rasnasaptaka kashayam*, *Maharasnadi kashayam*, *Dhanwantara kashayam* and *Sahacharadi kashayam* offers beneficial effect in joint pain.
- *Ksheera bala taila*, *Narayana taila*, *Gandha taila* and *Maha narayana taila* offers lubrication of joints and strengthening of cartilage, muscles, ligaments and bones.
- *Niruha* (decoction-based) *vastis* are recommended; herbal medicines *dashmoola* and *guduchi* commonly employed in *niruha vastis* which offer beneficial effect in joint pain.

## Herbs/formulation helps in joint pain:

- *Castor Oil*
- *Gugguls*
- *Guduchi*
- *Nirgundi*
- *Turmeric*
- *Ashwagandha*
- *Shatavari*
- *Triphala*
- *Dashmool*
- *Shallaki*
- *Eucalyptus*
- *Devadaru*

**Castor Oil (*Eranda, Ricinus communis*):**

Castor oil possesses astringent *rasa*, warm *virya* and pungent *vipaka*, it also offers purgative and analgesic action. It helps to normalize aggravated *pitta* and *kapha*, best for treating *vata* disease. Application of oils to the painful joints helps to aggravate inflammatory diseases.

**Guggul (*Commiphora mukul*):**

*Guggul* possess anti-inflammatory, *dipana* and *pachana* properties therefore help to reduce *ama*, *vata* and *kapha*. *Guggul* also help to lose weight which decreases extra burden to joint thus reduces pain. It also offers anti-microbial and analgesic properties which help to achieve symptomatic relief in joint pain.

**Guduchi (*Tinospora cordifolia*):**

*Guduchi* pacifies all *doshas*, offers anti-inflammatory and analgesic effect. This herbs act as prophylactic anti-infective agent thus reduces chances of joint diseases associated with infections. *Guduchi* offers relief in joint pain associated with *pitta*-type arthritis.

**Nirgundi (*Vitex negundo*):**

*Nirgundi* has a bitter, astringent and pungent *rasa* and warm *virya*. It is light and rough, best for the *kapha dosha* but also pacify *vata*. It offers anti-inflammatory and analgesic effect in arthritis, nerve pains and back pains.

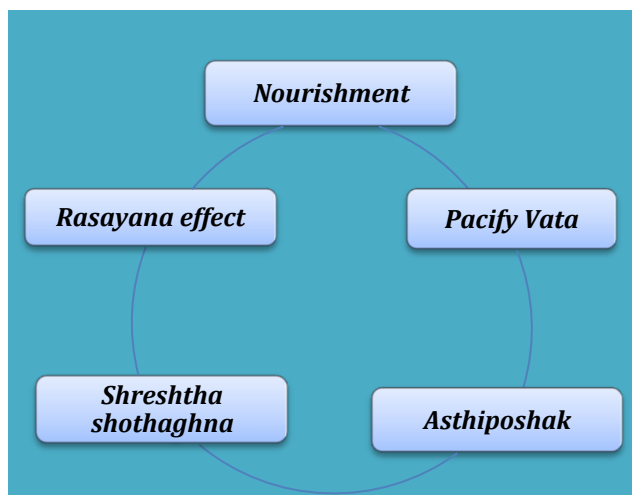


Figure 1: Role of herbal medicine in joint pain

*Nirgundi* is most common herbs used in joints; it reduces swelling, control inflammatory response, offers anti-oxidant properties and hot potency of *Nirgundi* boost joints and muscles.

#### **Turmeric (*Curcuma longa*):**

*Turmeric* possesses bitter *rasa* and warm *virya*; it having light and rough quality. *Turmeric* acts as an antimicrobial and anti-inflammatory agent thus help to reduce pathogenesis and symptoms of joint pain. It inhibits production of prostaglandin thus calm down inflammatory cascade and also stimulates production of cortisol which relief arthritic symptoms.

#### **Ashwagandha**

*Ashwagandha* has anti-inflammatory properties, help to calm *vata* and nourishes muscle and bone tissues. *Ashwagandha* possess adaptogen action and relief pain caused by the stiffening and constant stress of joints and muscles.

#### **Shatavari**

*Shatavari* offer highly beneficial healing qualities and anti-inflammatory properties which help to reduce symptoms of joint pain and enhance joint flexibility.

#### **Triphala**

*Triphala* has anti-inflammatory (*hreshtha shothaghna*) effects and helps in healing process, it provides nutrients which strengthen bones and detoxify toxins (uric acid) which may cause inflammation. These all effect of *Triphala*

provides great relief in gout, arthritis and other problems related to joint pain.

#### **Licorice (*Glycyrrhiza Glabra*):**

*Mulethi* or licorice offers beneficial effects in joint pain since it provides lubricating effect which supports joint tissues and improves flexibility. The reduction in joint pain is very significant during movement after the use of *Mulethi*.

#### **Dashmool**

*Dashmool* is a combination of roots of various herbs including; *patala*, *gambhari*, *brihati* and *shalparni*. It offers effective anti-inflammatory response and treats *Vata Roga*. Its anti-oxidant, analgesic and sedative properties also help to achieve symptomatic relief in joint pain.

#### **Shallaki**

*Shallaki* herb provides strength to joints, relieve joint pain, diminish swelling, increases mobility and pacify *dosha* which are responsible for joint disease.

#### **Eucalyptus**

Eucalyptus oil offers relief in arthritis, the tannins present in plant material help to reduce swelling and stiffness of joints. The aroma of oil offers calming effects and relieves joints pain.

#### **Devadaru**

It having *Shothahara* & *vedana sthapan* properties, therefore indicated in *jeerna sandhivata* & *Amavata*.

**Table 1: Some ayurveda formulation recommended in disease related to joint pain**

S. No.	Formulation	Properties
1	<i>Punarnavadi guggulu</i>	<i>Shreshtha shothaghna, Asthiposhak</i>
2	<i>Shiva gutika</i>	<i>Rasayana Guna</i>
3	<i>Dashamula qwath</i>	<i>Shreshtha shothaghna</i>
4	<i>Dashamula taila</i>	<i>Alleviate vata</i>
5	<i>Punarnava mandoor</i>	<i>Asthiposhak, osteoprotective</i>

#### **Role of medicine in joint pain pathogenesis:**

- Control deterioration of the cartilage and sub-chondral bone.
- Herbs help to pacify *Vata* and *Kapha doshas*, lessen *srotovarodha*, relieves pain, swelling, heaviness, stiffness and tenderness of joint.
- Use of *Tikta-Katu Aushadis* promotes *agni*, *srotoshodana*, reduces *kapha* and produces lightness in body.

- *Deepana* and *Pachana* medicines prevent formation of *ama* and nourish *dhatu*.
- Herbal medicine not only restores nutrition to diseased cartilage cells but also help to repair damage cartilage.
- Herbal drugs help to improve synovial fluid viscosity & concentration and strengthens bones; *brumhanam* effect.

## REFERENCES

1. Chopra A, A 32-week randomized, placebo-controlled clinical evaluation of RA-11, an ayurvedic drug, on osteoarthritis of the knees. *Journal of Clinical Rheumatology*, 2004; 10(5):236-245.
2. Kulkarni RR, et al. Treatment of osteoarthritis with a herbomineral formulation: a double-blind, placebo-controlled, cross-over study. *Journal of Ethnopharmacology* 1991; 33(1-2):91-95.
3. *JAMA* 2003; 290:3115-3121. Intra-articular hyaluronic acid in the treatment of knee osteoarthritis.
4. Singh D, et al. *Withania somnifera* inhibits NF- $\kappa$ B and Ap-1 transcription factors in human peripheral blood and synovial fluid mononuclear cells. *Phytotherapy Research* 2007; 21(10):905-913.
5. Chopra A, Patil J, Bilampelly V, Relwani J, Tandale HS. The Bhigwan (India) COPCORD: Methodology in first information report. *APLAR J Rheumatol* 1997; 1:145-54.
6. Ringdahl E, Pandit S. Treatment of knee osteoarthritis. *Am Fam Physician* 2011; 83:1287-92. Pubmed.
7. Pinals RS. Pharmacologic treatment of osteoarthritis. *Clin Ther* 1992; 14:336-46.
8. Kashinath Shastri. *Charak Samhita of Charaka. Chikitsa sthan 28 verse no.37*. Reprint edition, Varanasi; Chaukhamba Sanskrit Sansthan. 2009; 697.
9. Sri Brahma Sankar Mishra. *Bhavaprakasha Nighantu of Bhavamishra, Madhyam khanda, chapter 24 verse no. 259*, 12 th edition, Varanasi; Chaukhamba Sanskrit Bhavan. 2012; 265.
10. Saha S, Ghosh S. *Tinospora cordifolia: One plant many roles*. *Ancient Science of Life*. 2012; 4 (31):151- 159.

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