## **OSTEOARTHRITIS**

#### **BRIEF BACKGROUND**

Osteoarthritis is a chronic degenerative disorder, which commonly affects the knee joint. It is caused by damage to the joint's cartilage. Cartilage is lines the inner parts of the joint and cushions the ends of bones during different movements. Damage of the cartilage causes bones to rub against each other, causing pain and loss of movement. Osteoarthritis can range from very mild to very severe, and most commonly affects middle-aged and older people. It affects hands and weight-bearing joints such as knees, hips, feet and the back. Knee osteoarthritis is the most common form of osteoarthritis.

In India, increase in number of elderly due to increase in Life expectancy is observed in recent years; hence, the problem of osteoarthritis is also increased. Osteoarthritis of knee joint contributes to nearly 80% of total osteoarthritis burden and it majorly affects the quality of life.

The condition similar to Osteoarthritis has been described as 'Sandhigatavata' in Ayurveda, in which the vitiated Vata afflicts the joints and causes destruction of the cartilages and reduction in the Synovial Fluid inside the joint capsule, leading to swelling which results into painful movement.

#### **CAUSATIVE FACTORS**

- Consumption of dry, cold or stale food,
- Irregular sleeping habits,
- Suppression of natural urges, and
- Exposure to severe cold, and dry weather and

#### Local factors- such as

- degeneration of the cartilages due to ageing,
- Excessive strain on the joint,
- Any kind of injury to the joint, are the frequent causes of arthritis.



#### Symptoms of Osteoarthritis

- Moderate to severe pain at the affected joint,
- <u>Joint stiffness</u> observed especially after long spans of rest to the <u>affected joint</u>,
- Restricted and painful movements of the joint.
- Crunching or crackling noise when the joint moves (crepitation);
- Localized tenderness in severe cases,
- Swelling,
- Increased local temperature at the affected site.

#### **DIAGNOSTIC TESTS**

X-ray: X-rays can show damage and other changes related to Osteoarthritis to confirm the diagnosis.

#### AYURVEDIC MANAGEMENT

Ayurvedic treatment of Osteoarthritis prevents further deterioration in the joints and rejuvenates damaged cartilages. Vata-alleviating treatments through specific herbs are suggested for lubrication and strengthening of joints.

# (to be taken under supervision of Registered Ayurvedic physician)

## Shamana (Palliative) treatment:

The following drugs (single / compound formulations) are commonly used for prevention and control of osteoarthritis (sandhivata):

## Single Drugs

Shunthi (Zingiber officinale Rose.) churna, Eranda Mula (Ricinus communis Linn.) Kvatha, Nirgundi (Vitex negundo Linn.) kvatha, Guggulu (Commiphora wrightii Arn.)



## **Compound Formulations**

- For internal use: Maharasnadi kvatha, Dashamula kvatha, Rasnadi kvatha, Maha Yogaraja guggulu, Yogaraja guggulu, Guggulutikta ghrita, Panchatikta ghrita guggulu;
- For external application: Mahanarayana taila, Vishagarbha taila, Narayana taila, Mahamasha taila, Saindhavadi taila are beneficial

## Samshodhana Chikitsa (Purificatory procedures):

**Samshodhana Chikitsa** is a specialized therapeutic approach of Ayurveda to eliminate toxins from the body by giving *Panchakarma*. It is usually followed by *Shamana Chikitsa* (Palliative therapy). But it should be decided by the physician according to the condition of the patient whether *Shodhana* therapy is indicated or not.

- i) Local application of Eranda patra kalka, Dashanga lepa
- ii) Snehana (external): massage with medicated oils such as Mahanarayan taila, Dashamula taila, Mahamasha taila, Vishagarbha taila
- iii) Snehapana (Internal Oleation) by Guggulutikta ghrita / Panchatikta ghrita with Saindhava lavana
- iv) Svedana (Medicated fomentation): (localized or generalized hot fomentation)



Patra pinda swedana

Rasayana: Rason, Guggulu, Bala, Nagabala, Ashvagandha.







Ashwagandha

Lasuna

Bala

## PREVENTIVE MEASURES

# Life Style Modifications -

The following measures may reduce the risk of developing OA:

#### Do's:

- Intake of *Madhura* (sweet), *Amla* (sour), *Lavana* (salt) and *Snigdha* (unctuous) food, Garlic, Ginger, *Hingu*, Black pepper etc
- Regular habit of Exercising;
- Maintaining optimum weight;
- Avoiding excessive repetitive motions;
- Healthy diet;
- Protecting an injured joint from further damage

## Don'ts:

- Long fasting and excess of heavy food
- Awakening at night (Ratri jagaran),
- Vega-vidharana (suppression of natural urges),
- Stress,
- Prolonged standing,
- Over exertion and injury to joints

# Note:

- 1. Medication is to be strictly taken under the supervision of a Registered Ayurvedic Physician.
- 2. Visit National Institutes/CCRAS Research Centres for necessary consultation. (www.ccras.nic.in)

# FREQUENTLY ASKED QUESTIONS (FAQs)

#### What is Osteoarthritis?

Osteoarthritis is wear and tear condition of the joints, which causes bones to rub together, causing pain, swelling, and loss of motion of the joint. Osteoarthritis is the most common form of arthritis among older people.

## What joints are most often affected by Osteoarthritis?

Although osteoarthritis can occur in any joint, most often it affects the hands, knees, hips, and spine (either at the neck or lower back) in the following ways.



# How is Osteoarthritis diagnosed?

No single test can diagnose Osteoarthritis. When a person feels pain in his or her joints, it may or may not be osteoarthritis. The doctor will use a combination of tests to try to determine if Osteoarthritis is causing the symptoms. These may include -

- Medical history
- Physical examination
- X rays

#### What is the role of nutrition and diet in the treatment of Osteoarthritis?

Balanced diet with adequate supplementation of calcium can be helpful to patients. Whole grains, black beans, spinach, cabbage, carrot, cucumber, tomatoes, banana, orange, lemon, honey, raisins, fatless cottage cheese and coconut oil should be included in the diet. It is also advisable to avoid foods rich in fat. Drinking plenty of water is recommended. It also provides lubrication to the joints and reduces the risk of osteoarthritis.

## How do I know whether I am having or what are the warning signs of Osteoarthritis?

Warning signs of Osteoarthritis include

- Joint pain
- Swelling or tenderness in one or more joints
- Stiffness after getting out of bed or sitting for a long time
- A crunching feeling or sound of bone rubbing on bone.

Not everyone with osteoarthritis develops symptoms. In fact, only a third of people with X-ray evidence of osteoarthritis report pain or other symptoms

## Can exercise help treat osteoarthritis?

Yes, exercise is one of the best treatments. Exercise can decrease pain, and assist in maintaining a healthy weight. The amount and form of exercise will depend on which joints are involved. The following types of exercise are found beneficial. But should be done under strict supervision of Physiotherapist

- Strengthening exercises.
- Aerobic activities.
- Range-of-motion activities.
- Balance and agility exercises.

#### What are the activities that increase the risk of Osteoarthritis?

Activities that increase the risk of osteoarthritis include:

- Twisting of the leg (E.g. Football or baseball sport)
- Jerky movement
- Prolonged standing (E.g. in case of Traffic policemen)
- Prolonged kneeling (E.g. Coal miners)
- Squatting

## What are the do's and don'ts for an Osteoarthritis patient?

Include a brisk walk in your schedule either in the morning or evening for 30-40 minutes for 3-4 days weekly. Bend at your knees with your back straight to pick up any object from the ground. Avoid crossed knee sitting. Avoid lifting heavy weights. Avoid prolonged duration of activities, which strain the joints like gardening, prolonged standing, kneeling and squatting etc.

## When should I consider surgery?

When conservative measures for treating Osteoarthritis fail and pain in a specific joint disables an active individual, surgery may restore a patient's comfort and ability to pursue normal activities. Since such a surgery will relieve pain more than it will restore range of motion. the best candidate for surgery is the patient whose arthritic pain has interrupted the activity of daily living (i.e. can't walk more than a block or awakens from sleep with pain in the affected joint) and who has not been helped sufficiently by activity modification, physical therapy and drug therapy. For such patients, surgery relieves joint pain and improves their quality of life.