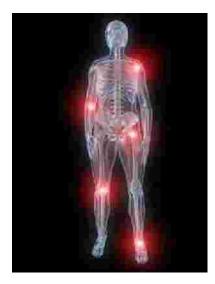
# Osteoarthritis

# **Prevalence and Colloquial Definition**

Of the more than 100 types of arthritis, Osteoarthritis is by far the most common. OA affects nearly 27 million people in the United States. Like other chronic conditions, osteoarthritis has no single, specific cause. Instead, there are several factors involved in disease, including heredity and <u>lifestyle</u>.



# **Official Definition**

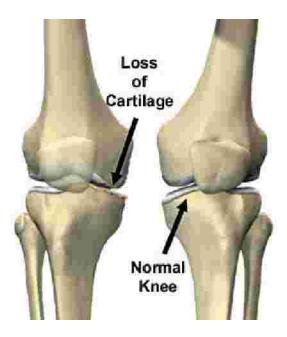
Osteoarthritis, also called degenerative joint disease, is a type of arthritis that is caused by the breakdown and eventual loss of the cartilage of one or more joints. Cartilage is a protein substance that serves as a "cushion" between the bones of the joints. This condition is distinguished from other types of arthritis by being d ly related to age and wear and tear of the joint structures.

## Causes

- Many changes in the body may trigger joint degeneration. Age alone changes the quality of cartilage, making it drier and more prone to injury
- Being overweight, which adds stress to hips and knees
- Repetitive pounding stress such as running or jumping without adequate support
- Hormonal imbalances or nutritional deficiencies may compromise joint health
- History of trauma or surgery (such as meniscus) is another predisposing factor

# Signs and Symptoms

- Pain: Your joints may ache, or the pain may feel burning or sharp. For some people, the pain may come and go.
- Stiffness: When you have arthritis, getting up in the can be hard. Your joints may feel stiff and creaky for a short time, until you get moving.
- Muscle weakness: The muscles around the joint may get weaker. This happens a lot with arthritis in the knee.
- Swelling: Arthritis can cause swelling in joints, making them feel tender and sore.
- Deformed joints: Joints can start to look like they are the wrong shape.
- Reduced range of motion and loss of use of the joint: As your arthritis gets worse, you may not be able to fully bend, flex, extend your joints or you may not be able to use them at all.



# **Lifestyle Considerations**

#### Diet

- Some patients notice that particular foods can trigger arthritis flares. In rega to arthritis, these more frequent offenders tend to be : dairy products, nightshade vegetables (tomatoes, peppers, etc.), sugar, chocolates, red meats and salt.
- Overweight patients with osteoarthritis can lessen the shock on their joints by losing weight. Losing 5 pounds of weight can eliminate 20 pounds of stress on the knee. The greater the weight loss, the greater the benefit.

#### Exercise

A moderate exercise program that includes low-impact aerobics and power and strength training has benefits for patients with osteoarthritis. Long periods of inactivity cause the arthritic joint to stiffen, muscle to atrophy and ligaments to become weak.

#### **Stress Management**

Feeling stressed, depressed, and overwhelmed by arthritis pain is common. Coping mechanisms, such as using support systems, exercise, and relaxation techniques are key in managing pain.

#### Pain Management

- Use heat and cold to manage pain. Heat also relieves stiffness and cold can relieve muscle spasm.
- Medications may be prescribed to reduce pain caused by osteoarthritis. Pain-relieving drugs include acetaminophen (for example, Tylenol) and anti-inflammatory drugs (often called NSAIDs), such as aspirin and ibuprofen
- Glucosamine may be particularly helpful in the early stages of osteoarthritis of the knee. These substances can help reduce swelling and tenderness, as well as improve mobility and function.
- <u>Massage</u> and <u>Acupuncture</u> have been proven to be safe and effective ways to reduce pain and improve function in adults with osteoarthritis.

# **Patient Education**

OA treatment is tailored to the needs of each individual. Patient's symptoms vary widely due to the location of the joints involved, the rate of progression and of the highly individual nature of the disorder and its potential impact on the patient's life. Education and reassurance for the patient, their family, and caregivers is recognized as an important component of OA therapy. It is essential to understand the benefits of the patient taking an active role in the management of their disease.

# Zanjabee Management Approach

At Zanjabee, we provide a full range of integrated services enabling us to assess and provide the most effective course of treatment for you and your condition including:

- 90 minute consult with our board certified physicians, which includes a comprehensive medical history and physical examination to identify any underlying physical cause, mental illness or substance use contributing to anxiety.
- Appropriate Laboratory / Imaging Tests
- Patient journal review: We ask patients to keep a dairy detailing their food, sleep, exercise and other significant events. Diary review assesses life stressors and daily routine. This forms the basis for personalized <u>lifestyle</u> support recommendations
- Practitioner team meets to develop a personalized, integrated treatment plan for each patient
- Recommendations and guidance to appropriate complementary treatment including physician team follow up

## **Specific Treatment for Osteoarthritis**

#### Western Medicine

Both Wear and tear and increased inflammation contribute to evolution of Early disease shows swelling of joints as cartilage cells try to repair the damaged cartilage. Later there is loss of cartilage and denuded bone on bone causes excruciating pain.

- <u>Lifestyle measures</u> and glucosamine are critical to joint preservation and managing pain
- Non Steroidal Anti Inflammatory Drugs (NSAIDS) like Aspirin, Acetaminophen, and Ibuprofen are the mainstay of pain relief but they can be damaging to the stomach, kidneys and liver and do not prolong the life of the joint.
- In some cases, cartilage is harvested from the joint, in the lab and re-injected into the joint with good results but this technique has limited applications so far.
- Joint replacement with metal joint prosthesis are the of advanced OA and prevent a great deal of suffering. Newer joints last for greater than 10 years in some cases and allow more movement than their predecessors.
- Prosthetic Joints do not allow the same degree of movement as our original joints and therefore joint preservation via weight loss, <u>mindfulness</u> regarding posture, preventing reinjury and optimization of muscles and ligaments via stretching and weight training remain critical.

#### Acupuncture

In Chinese medicine, OA is called Painful Obstruction ome, which indicates pain, soreness or numbness of muscles, tendons and joints from invasion of external Wind, Cold or Dampness. Usually all three of these are present in painful obstruction syndrome.

The causes are often:

- Weather
- Excessive sports or job activities
- Accidents
- Emotional problems

Invasion of these factors is due to pre-existing conditions of deficiency of <u>Qi</u> and blood usually in the channels and not in the organs. Another very important predisposing factor is an underlying deficiency of Blood and Yin, which is very common in the elderly.

<u>Acupuncture</u> is very effective in the acute stage. It is helpful in chronic conditions as well, but it takes much longer to help, because underlying deficiencies need to be addressed. In the chronic stage it is better to use herbs and/or supplements in conjunction with <u>acupuncture</u>.

#### Ayurveda

OA is called sandhivata in <u>Ayurveda</u>, which literally translated means aggravated <u>Vatta</u>, which has localized in the sandhi or joint. The vatta energy or humor is predominant in air and ether elements, both of which have a drying quality to them. Hence an individual, whose predominant

humor is vatta, will be more prone to developing OA, compared to a <u>Pitta</u> or <u>Kapha</u> dominant type. Also, any individual who indulges in vatta aggra dry, raw and cold foods in excess, irregular sleeping exposure to severe cold, and dry weather, will be like other causes of OA like injury, scar tissue, etc.

The first step of the treatment would be to eliminate minimize the diet and <u>lifestyle</u> related causes. The next step would be to formulate a customized protocol with recommendations for conducive and suitable diet and <u>lifestyle</u>, as well as herbs and herbal formulations. Some standard recommendations include internal administration of <u>Ghee</u> or castor oil, for internal lubrication, as well as one or two preparations of <u>Guggulu</u> or Comniphera mukul, which is anti-inflammatory and analgesic. Another commonly prescribed group of herbs is <u>Dashamula</u> or ten roots. There are very effective pain-relieving external applications as well, such as: medicated oils, steamed herbal leaves, poultices, etc.

#### Massage

<u>Massage</u> therapy is a powerful weapon in the fight to relieve the discomfort and pain related to osteoarthritis. Muscles and tendons support and move all the body's joints. Thus, inflamed and painful joints affect muscles and tendons. Because <u>massage</u> therapy is a passive form of exercise, it can help OA sufferers by increasing circulation, range of motion and tissue suppleness, all while removing lymph from between the cells.

## Zanjabee Approach to Osteoarthritis

- 1. Early Diagnosis: Zanjabee emphasizes early diagnosis in OA. Joint cartilage does not regenerate well once it is destroyed hence treatment in advanced OA mainly focuses on pain management.
- 2. Acute Treatment: When the joint is acutely inflamed and painful, joint rest, <u>Massage</u> and application of heat and cold appropriately are very important. <u>Massage</u> and <u>Acupuncture</u> as well as poultices from <u>Ayurveda</u> can be very helpful in this stage
- 3. Halting the progression of disease:
  - <u>Lifestyle</u> changes especially weight loss and exercises that improve muscle tone and joint flexibility without further damaging the joint are key in preventing the progression of disease and getting back maximal function.
  - <u>Ayurveda</u> body typing and diet and supplement suggestions according to body type can be very helpful
  - Glucosamine has been shown to improve pain in OA as we l.
- 4. Surgery: If conservative measures do not succeed, we help our patients find the right orthopedic surgeon at the right time for a partial or full joint replacement which can give back mobility, relief from pain and increased freedom of movement.
- 5. Relief from Pain: If a Zanjabee patient is not a candidate for or does not want surgery, a pain management plan based on <u>Massage</u>, <u>Acupuncture</u> and <u>Herbs</u> is developed to serve the individual needs of the patient.