

## Non-surgical management continued:

### Physical Therapy:

A physical therapist is a qualified health care professional who can evaluate your range of motion, strength, flexibility, balance and functional abilities to determine an appropriate exercise regimen and recommend lifestyle modifications as needed.

### Surgical management:

If the conservative, non-surgical management options are not achieving their goals of reducing patient symptoms or improving function, surgical management may be the next step. Surgical options include arthroscopy, osteotomy, joint fusion and/or joint replacement.

An **arthroscopy** is typically completed to remove excess bone, loose cartilage or other soft tissue fragments.

The goal of an **osteotomy** is to relieve pressure on the joint by realigning the bones of the joint.

A **joint fusion** is when the joint ends are fused together via pins, plates, screws, or rods.

Lastly, a **joint replacement or arthroplasty** is when the surgeon removes the deteriorated parts of the joint and inserts an artificial joint in its place.

## Additional Resources for Osteoarthritis

<http://www.arthritis.org/>

<http://www.niams.nih.gov/>

<http://www.webmd.com/osteoarthritis/>

<http://orthoinfo.aaos.org/topic.cfm?topic=a00227>

### Smoking Cessation Resource

<http://www.cdc.gov/tobacco/campaign/tips/quit-smoking/>

### BMI Calculation for Weight Loss Resource

<http://www.nhlbi.nih.gov/guidelines/obesity/BMI/>

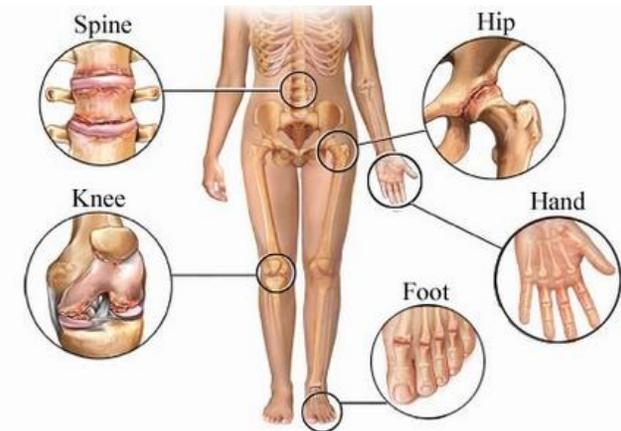
# Osteoarthritis (Degenerative Joint Disease)



## REFERENCES/ DISCLAIMER

A copy of all resources can be furnished upon request, as well as a copy of the cited pamphlet information.

Please follow up with a physician as needed; as this pamphlet is not intended to replace full medical treatment.



KAH Premium Physical Therapy  
97F Main Street  
Stony Brook, NY 11790  
Phone: (631) 751-6680  
E-mail: kahppt@gmail.com  
Website: <http://www.kahppt.com/>  
Made by: Danielle Quarello



Osteoarthritis



Healthy knee joint

Hypertrophy and spurring  
of bone and erosion of cartilage

## What is osteoarthritis?

Osteoarthritis (OA) also known as degenerative joint disease is frequently referred to as “wear and tear” of the joints. OA is the most common form of arthritis and is a progressive disease of the entire joint including the cartilage, joint lining, ligaments and underlying bone.

## How do I know if I have OA?

OA is diagnosed based on an individual’s symptoms and a physical examination including pathology,

Primary symptoms include pain, swelling and stiffness; secondary symptoms may include clicking or joint noise such as grinding. Healthy cartilage acts as a cushion and allows the joint to bend pain free throughout the full range of motion. Once the cartilage and other soft tissue structures of the joint begin deteriorating, the space between the two bones decreases and becomes more narrow. Swelling may occur due to the increase in joint friction with movement caused by the narrow space. Additionally, tears in the cartilage can prevent full joint motion. This may be due to joint pain or from the tear blocking the surfaces from moving freely over each other.

When bony areas rub together this causes stiffness and extra bone is built in areas it shouldn’t be. The additional bone formation is sometimes referred to as a bone spur, additional bone formation which occurs in reaction to the forces placed upon it.

Pathology includes radiographic changes such as joint deterioration (narrowing joint space), bone spurs (additional bone growth), and effusion (excess fluid in the joint).

## What joints are mainly affected?

OA is most prevalent (common) in the hip and knee joints, finger joints, and joints of the spine.

## What causes OA?

There is no one particular cause of OA but rather a combination of contributing factors that over time, are thought to result in the breakdown of the joint integrity.

## Risk factors include...

Age: middle aged individuals begin to be affected; individuals 65 years or older are at an even greater risk for developing OA

Obesity

Previous injury to the involved joint

Family history

## Statistics concerning OA?

One in five (22.7%) adults in the United States report having doctor diagnosed arthritis. (Source: CDC)

By 2030, an estimated 67 million Americans ages 18 years or older are projected to have doctor-diagnosed arthritis. (Source: CDC)

## How do I manage OA?

OA can be managed non-surgically or surgically depending on the severity of the disease and the patient’s impairments and functional limitations. OA is managed by trying to slow the progression of the disease by reducing symptoms and impairments while improving and restoring function.

## Non-surgical management includes:

### Lifestyle modifications:

Weight loss program if necessary (refer to resources)

Smoking cessation (refer to resources)

Limit alcohol consumption

Changes in work or sports activity level based on the patients symptoms.

### Medications:

Non-steroidal anti-inflammatory drugs (NSAIDs) can aid in decreasing joint inflammation. Corticosteroids are stronger NSAIDs and are typically injected directly into the affected joint, localizing treatment.

Glucosamine and chondroitin are common supplements taken by those with OA to assist in reducing pain over time. The effectiveness of these supplements is controversial and inconclusive.

Prior to taking any medications or supplements you