

Osteoarthritis

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Definition and Risk Factors

Osteoarthritis occurs when the cartilage between the two joint surfaces breaks down. The purpose of this cartilage is to decrease the friction between the bones. When this cartilage breaks down it causes bone on bone rubbing which can lead to increased pain and inflammation in the joint.

Risk Factors

- Increased age
- Sex: woman are more at risk for arthritis than men
- Obesity: Increased weight adds stress on weight bearing joints
- Joint Injuries
- Occupations: occupations that cause repetitive trauma to joints
- Genetics
- Bone deformities

Signs and Symptoms

Weight bearing joints are the most commonly affected by osteoarthritis including knees, hips, and spine. Hands are also commonly affected. Common signs and symptoms are:

- Pain: especially during or after movement
- Tenderness around the joint
- Stiffness: most common when waking up in the morning or after periods of inactivity
- Decreased motion/flexibility
- Grating/grinding
- Bone spurs

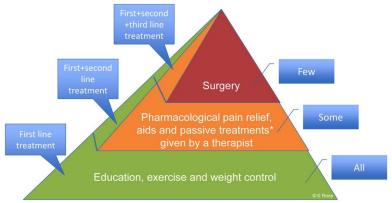
Management

Unfortunately, osteoarthritis cannot be cured or reversed but symptoms associated can be managed to decrease their limitation on your functional activities!

Lifestyle and Home Management

- Exercise: helps to increase strength and flexibility of the joint to decrease stiffness and improve stability
- Weight loss: Decreases the stress on affected joints

- Cold/Heat packs: Heat can be used to decrease stiffness in the joint. Ice is used to decrease pain and inflammation
- Joint cream: Can temporarily help to decrease joint pain
- Braces/orthotics: A brace can help to immobilize or stabilize the joint. Orthotics can also be used to help support the joint and decrease abnormal pressure.
- Assistive Device Use: Using a cane in the opposite UE of the painful joint can help to decrease the pressure needed on that joint when walking.
 Other Management
- Medication: NSAID's (Ibuprofen, Aleve, Ect) help to decrease inflammation
 Talk to your doctor before starting any new medications
- Physical Therapy: See below
- Steroid/Lubrication Injections: Can help decrease inflammation. Ask your orthopedic doctor for further information on these treatment options.
- Joint Replacement: The damaged joint is replaced by plastic/metal parts. Ask your orthopedic doctor for further information on this treatment option.



Physical Therapy Treatment

When a joint becomes painful individuals tend to decrease the use of that joint. Decreased use can lead to decrease in strength, mobility, and flexibility of the joint. Decreased flexibility and strength of the muscles surrounding the joint can lead to more contact between the joint surfaces, increasing pressure and pain. Physical therapy can help with:

- Flexibility: Sustained stretching (30 sec hold) can help improve the length of the muscle and decrease tightness. PT can help you determine which muscles need to be stretched
- Motion: Improvement and maintenance of mobility is important to maintain lubrication of the joint and decrease stiffness
- Strength: PT can help determine what muscles are weak and help develop an individualized strengthening program. PT can determine what weights and repetitions to begin with that are safe for you and your joints!
- Pain relief
- Education: The overall goal for PT is to educate you on exercises and other techniques to manage your symptoms at home!