

Osteoarthritis

What You Need to Know About the Most Common Form of Arthritis

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What is osteoarthritis?

Osteoarthritis is caused by the progressive loss of articular cartilage. Cartilage helps pad and protect our bones and creates a smooth frictionless environment. Loss of cartilage results in grinding of the bones which leads to pain and inflammation.

Osteoarthritis is a progressive disease. The more osteoarthritis you have, the more you're at risk for getting.

How does osteoarthritis occur?

Risk factors for osteoarthritis include age, genetics, obesity, trauma, injury, and repetitive high impact activities.

Low grade inflammation causes breakdown of the articular cartilage resulting in joint dysfunction. Damage to articular cartilage causes the release of toxic enzymes and inflammatory proteins. This creates a harmful environment which causes further damage to the cartilage. This cycle repeats itself until all the cartilage is lost and bone comes into contact with bone.

The ultimate result is stiffness, decreased range of motion, swelling, and pain.


How is osteoarthritis treated?

Treatment of osteoarthritis should focus on prevention.

1. Exercise therapy is critical to decreasing pain and improving function. Aerobic exercise such as walking or stationary bike helps increase the production of lubrication in the joint. This helps the joint move smoothly.
2. Resistance training and rehabilitation exercises strengthen the muscles around the leg to help take pressure off the joint.
3. Load management and weight loss help to reduce overloading the joints.
4. Injections with platelet rich plasma or hyaluronic acid can help slow the progression of osteoarthritis.

Patient Education - Knee Osteoarthritis

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| <p>Everything on Knee Arthritis Treatment Without Surgery: https://youtu.be/z3veeAgR8AQ</p>  | <p>Knee Arthritis Exercises: https://youtu.be/aMMHfFjwAmM</p>  | <p>X-ray Stages of Knee Arthritis: https://youtu.be/WiZoV8PJ_tQ</p>  |
| <p>Treat Muscles to Relieve Knee Arthritis Pain: https://youtu.be/f49OKQum87w</p>  | <p>Exercise Therapy vs Ibuprofen for Knee Arthritis Pain: https://youtu.be/1rFO54npL5A</p>  | <p>Is it Safe to Walk with Knee Arthritis? https://youtu.be/m1hqe5DBEqM</p>  |
| <p>PRP Injection for Knee Arthritis: https://youtu.be/H00QwpctKKE</p>  | <p>PRP Slows Down Knee Arthritis Progression: https://youtu.be/_7HU_-YDfQY</p>  | <p>PRP Injections vs Stem Cell Injections for Knee Arthritis: https://youtu.be/JjkQvbM6rsW</p>  |
| <p>How Many PRP Injections Do You Need? https://youtu.be/6ZcvgWxMIXQ</p>  | <p>Are PRP Booster Injections Necessary? https://youtu.be/4pHwrWVDQTc</p>  | <p>Meniscus Tear Treatment Without Surgery https://youtu.be/hmSsJgpq03k</p>  |
| <p>Anti-Inflammatory Diet & Weight Loss for Arthritis https://youtu.be/MY1_6EnkChg</p>  | | |

Knee Osteoarthritis Treatments

| Knee Osteoarthritis Treatment | Short term pain benefits | Mid to Long term pain benefits | Risk for Worsening Arthritis | Risk of MAJOR side effects | Cost of Treatment | Dr Peng's Recommendation |
|-------------------------------|--------------------------|--------------------------------|------------------------------|----------------------------|-------------------|---------------------------|
| Exercise Therapy | Mild | High | Decreases | None | None | Highest |
| Weight Management | Mild | High | Decreases | None | None | Highest |
| Anti-Inflammatory Diet | Mild | Mild | May decrease | None | Minimal | Highest |
| Platelet Rich Plasma | Moderate | Moderate | Decreases | None | \$\$ | Moderate - High |
| Trigger Point Injection | Mild - Moderate | Mild - Moderate | None | None | \$ | Moderate |
| Hyaluronic Acid | Mild - Moderate | Mild | May decrease | Very low | \$\$ | Low - Moderate |
| Dextrose Prolotherapy | Mild - Moderate | None | None | None | \$\$ | Low |
| Genicular Treatment | Mild - Moderate | None | None | None | \$\$ | Low |
| Supplements | Mild | None | None | None | Minimal | Low, turmeric favored |
| Knee Braces | Mild | None | None | None | Minimal to \$ | Low, knee sleeve favored |
| Topical NSAIDs | Mild | None | None | None | Minimal | Use as needed |
| Tylenol | Mild | None | None | Very low | Minimal | Use as needed |
| Oral NSAIDs | Mild | None | None | Low - Moderate | Minimal | Use sparingly |
| Bone Marrow Stem Cells | Moderate | Moderate | Decreases | Low | \$\$\$\$ | Consider prior to surgery |
| Adipose Tissue Stem Cells | Moderate | Moderate | Decreases | Low | \$\$\$\$ | Bone marrow favored |
| Cortisone Injection | Mild - Moderate | None | Increases | Low | \$ | Not more than 1 or 2 |
| Opiates | Mild | None | None | High | Minimal | Not recommended |
| Knee arthroscopy | Mild | Mild | Increases | Moderate | \$\$\$ | Not recommended |
| Knee replacement | Poor | High | N/A | Moderate | \$\$\$\$ | Personal decision |