

Title: Why does my knee hurt?

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Abstract:

Osteoarthritis of the knee is an increasingly common cause of knee pain and disability. Once rest, icing, exercises and pain medicines have failed, many turn to knee injections. Steroid injections have long been the standard therapy for pain reduction, but the benefits are often limited to one to two months, and it is not recommended to have more than three to four steroid injections in the same knee. Hyaluronic acid injections - a synthetic joint lubricant - have been shown to have milder, but longer-lasting pain relief than steroid injections, and may slow the progression of knee degeneration.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

**KNEE OSTEOARTHRITIS** is the “wear and tear” kind of arthritis. It bothers an estimated 10% of Americans over the age of 55, and many under age 55. Causing pain, swelling and stiffness, knee osteoarthritis is a leading cause of disability, early retirement and knee replacement surgery.

When we walk, a cushioning layer of *cartilage* allows the bones in our knees to slide painlessly past each other. In osteoarthritis, this layer wears down over time. As this happens, the bones begin to rub against each other causing pain and swelling. These symptoms get worse with activity, and improve with rest.



The disease is progressive, can be inherited, and is unfortunately without a cure. Those with knee injuries or a history of overuse have a higher chance of getting knee osteoarthritis. Treatment can help relieve pain and slow degeneration.

#### REFERENCES

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## WHY DOES MY KNEE HURT?

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PREVENTION, TREATMENT AND LIVING WITH KNEE  
OSTEOARTHRITIS

Pamphlet put together by Ryan Clay, MS3 2010

## PREVENTION

One of the best things you can do to prevent or reduce the symptoms of knee osteoarthritis is to maintain a healthy weight. Obesity puts more stress on the knee and greatly increases the risk of later developing knee osteoarthritis. Weight loss also reduces the symptoms. Regular exercise strengthens the muscles that hold your knee in place, reducing the long-term wear and tear.

## HOME TREATMENT



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The best treatment for osteoarthritis often is simple - rest, icing for 20 minutes at a time, two times a day - and ibuprofen. Exercise that doesn't put stress on the knee joint, including swimming and bicycling, can help strengthen muscles that pull your knee into the best position to prevent further damage and pain.

Additionally, over-the-counter supplements such as glucosamine and chondroitin have helped some with their knee pain, and may help slow the progression of osteoarthritis.

If none of this works, your doctor can prescribe stronger pain medicine, and can offer physical therapy.

## STEROID INJECTIONS



When pain medicines, icing and exercise no longer help, many find relief from steroid injections into the knee. These work by decreasing the inflammation in the knee, and usually last for a month or two. Unfortunately, it is not a good idea to have this done more than three to four times because it can speed the damage done to your knee. Your knee should feel better right away since these injections are often mixed with a local numbing medicine, and then the steroids take effect over the next few days.

## HYALURONIC ACID INJECTIONS

A synthetic joint fluid can also be injected, mixed with a local anesthetic. It helps add extra lubricant and cushioning into the knee. This provides milder, but longer relief than steroid injections, and may even help the knee start to heal. Unfortunately these injections are currently expensive, but they are becoming more common and are a good option to ask your doctor about.

## KNEE ARTHROSCOPIC SURGERY

As the knee deteriorates, bits of bone and cartilage can break off and get stuck in the joint space. This worsens pain and can lock up the knee. Arthroscopic surgery cleans those bits out, and most people have relief with this surgery. Unfortunately, most have a gradual return of their symptoms as the knee continues to wear down.

## KNEE REPLACEMENT SURGERY



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The definitive surgery is to replace the knee entirely. The replacement is made of metal, cemented into your bones. Because the metal does not have any nerves, unlike bone, there is no longer any knee pain. Knee replacements last up to 20 years without having symptoms, but may have a number of complications. The replacement requires being put to sleep to have the surgery, so it is saved until all other therapies have failed.

