

Knee Pain in the Neighborhood?

By: Nate Dixon, D.P.T.

A good head on your shoulders, smiling-bright eyes, a willingness to help your neighbor, and now you find yourself sitting at home with a pair of bad knees! Knees so painful that it changes your normal routine and you find it is interfering with how well you play (insert your sport here) and work. It is now time to ask yourself what options are there available to regain healthy, helpful knees.

To start, get a thorough evaluation of your knees by a physical therapist or physician who specializes in uncovering the source of knee pain. Anatomically, the pain may originate from the tendons, bursae, cartilage, loose ligaments, or weak muscles causing poor alignment. The knee joint is a bicondylar hinge joint, which means it moves in one plane (like a hinge), but it also allows a very limited amount of rotation and sliding back and forth. For the most part, it is a very stable joint with strong muscles and ligaments to maintain its alignment. A good evaluation will find the source of the problem through a description of the onset of pain and special tests.

The troubles begin when excessive forces are applied to the joint causing increased friction and stresses. Activity modification is the first consideration in relieving the stresses. Decreasing the intensity and the amount of weight-bearing through the knees is important. This can be achieved by using a cane or crutches, wearing a special knee brace called an Osteoarthritis Unloader Brace (specifically for arthritis), or performing exercises in the water.

Standard or modified exercises are performed to gain strength and flexibility. Wearing an appropriate knee brace and foot orthotics are also good ways to assist in managing the pain. Physical therapy procedures may also be beneficial to the healing process. Other non-surgical options include nutritional supplements, namely glucosamine and chondroitin, which research shows it is beneficial in stopping the progression of arthritis, but does not necessarily reverse the damage. Prevention of oxidative damage to the cartilage is also important and can be accomplished by eating lots of anti-oxidants found in fruits and vegetables.

Physicians may be able to help through medications, injections, or surgery. Surgical options range from repair of cartilage to the dreaded total knee replacement – which typically has excellent outcomes. There are also some exciting new treatments utilizing genetic engineering to grow a cartilage matrix in a lab, and then surgically place it in the joint!

Finally, some general recommendations would include: 1) Eat healthy foods and keep your body slim and trim to keep the weight bearing pressures to a minimum; 2) Wear supportive shoes with good shock absorption to avoid the extra stresses of daily walking on hard surfaces; 3) Athletes can minimize their risk of injury by improving their quickness and coordination; and 4) Perform appropriate exercises for strengthening and flexibility, without overdoing it and begin fitness programs gradually.

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