

OHHH, THOSE aching KNEES

Whether its from decades of pounding the pavement in search of fitness or the luck of the draw in terms of genetics, the American Medical Association says 10 million Americans have osteoarthritis of the knees. A degenerative joint disease, it is the most common form of arthritis and develops when the cartilage between two bones gradually disappears. Over time, osteoarthritis causes varying degrees of pain and/or swelling, with symptoms often appearing while standing or walking and even before weather changes.

Wear and tear on the two bones causes them to rub against each other, and understandably, this causes pain. Deteriorating leg joints make movements such as stooping or kneeling nearly impossible, while simple things like taking the stairs can prove challenging. As the cartilage thins, pain, swelling and stiffness develop. Typically, it leads to a loss of flexibility in the knee joints, felt most acutely in the morning or after activities or exercise.

There are four main areas of treatment for this common condition. Initially, over-the-counter pain relievers like acetaminophen and ibuprofen can help. Beyond that, various prescription drugs and topical painkillers address the problem. An over-the-counter cream called capsaicin is FDA approved for arthritis pain relief and sold under various brand names. In addition, products like Celadrin, a cream containing cetylated fatty acids, has been heralded by magazines like *Rheumatology*

for improving mobility and function to osteoarthritic knees, and a lidocaine patch is noted for providing similar relief, although neither have been FDA approved yet for that specific use.

Dietary supplements like glucosamine and chondroitin, found naturally in cartilage, are often recommended to relieve arthritic pain, and for temporary inflammation and injury, knee braces like elastic wraps can offer the support necessary for healing.

Cortisone injections, delivered straight into the knee, are used to reduce flare-ups, although patients must wait about four months between treatments. A more serious procedure, viscosupplementation, injects a lubricating fluid into the joint, with relief lasting up to six months. Eventually, surgery is a viable option when the joint is in need of repair or even replacement. Procedures range from partial knee replacement (unicompartmental arthroplasty), in the case of knee damage but retention of healthy cartilage, to a total knee replacement. During the latter, the surgeon cuts away damaged bone and cartilage from the thighbone, shinbone and kneecap, replacing it with an artificial joint constructed from metal alloys, high-grade plastics and polymers.

For prevention, maintaining an ideal weight can help immensely since extra pounds have a serious impact on the body and its weight-bearing abilities. In addition, weak muscles are a leading cause of knee injuries, so medical authorities recommend including stretching and flexibility exercises to workouts as well as strength training like knee extensions, hamstring curls and leg presses. 

