

Can New Techniques Really Replace Cartilage Lost to Arthritis?

The controversy is electric. Clinics are opening across the country promising they can regenerate cartilage lost by arthritis by injecting products such as hyaluronic acid or platelet rich plasma (PRP) into the knee joint, the most common area that suffers degeneration.

But experts say that these techniques only provide temporary anti-inflammatory relief, at best, and repeated injections may actually worsen the condition.

Statistics show that men can lose an inch in height between the ages of 30 to 70, and women can lose up to two inches. After the age of 80, it's possible for both men and women to lose yet another inch, says Dr. Jason Theodosakis, author of the bestselling book, "The Arthritis Cure."

"People get short as they age for several reasons," says Theodosakis. "The arches of the feet can flatten, others may suffer tiny vertebral fractures which can cause their spine to move forward and their shoulders to hunch. And if their posture is chronically bad, their bones can remodel themselves into a hunched position."

But another very common reason that we shrink is that we lose cartilage as we age, which is essentially osteoarthritis, the wear and tear of the joints. In addition to affecting our height, cartilage loss helps to explain why our joints may feel creaky and uncomfortable, causing people to stop exercising.

"And without exercise their joints become stiffer," says Theodosakis.

Dr. Brian Cole, associate chairman of the Department of Orthopedics at Rush

University Medical Center, tells Newsmax Health that surgical procedures are available for cartilage loss due to trauma and injury in younger patients but may not be suitable for older folks suffering from osteoarthritis.

“In my experience we see this mostly in the knee joint and very rarely in other joints, especially in the ankle which you would think would suffer the most wear and tear,” says Cole, the physician for the Chicago Bulls and Chicago White Socks teams. “Cartilage loss from arthritis definitely has a genetic component.”

Cartilage has many functions in the body, reducing friction and acting as a cushion between joints to help support our weight when we move. When the cartilage becomes damaged, called articular cartilage degeneration, the patient may suffer inflammation, stiffness and experience limited range of motion. According to the National Institutes of Health, one-third of American adults aged over 45 suffers from some sort of knee pain.

While medical centers offer promising miracle elixirs to regenerate deteriorated cartilage due to OA, they may offer false hope, says Cole.

“There are several surgical procedures for young patients who have a subset of cartilage lost not due to OA, but for those who are elderly, it's best to treat the symptoms and learn to co-exist with the condition,” he says. “Once the cartilage has degenerated over age, the rest of the knee has also deteriorated so putting in fillers to cushion a damaged joint is like putting new sod on old soil. You may get temporary relief, but it's not a cure.”

Cole says that learning to live with your condition and making smart lifestyle choices can alleviate the pain and stiffness.

“Lose weight if you are overweight,” he stresses. “Lighten the load on that knee. Talk to your doctor about taking anti-inflammatory medication.

“The spice turmeric may also reduce pain and inflammation and for some,

taking glucosamine and chondroitin supplements are helpful.”

Cole says that it’s also important to adapt your exercise program to reduce the pressure on the knee joint. Instead of running, use the elliptical machine, swim or bike.

“Strengthen the muscles around the knee joint to increase stability with specific exercises that a physical therapist can teach you,” he says, “Most of all, learn to take a deep breath and trust that the symptoms will subside.

“Shop the perimeter of the supermarket to reduce your consumption of processed foods that are cause inflammation. Eat a healthy diet that includes grains, fish and fresh fruits and vegetables.

“We are on the brink of making progress in our ability to regrow cartilage,” he says. “I believe that that technology is on the horizon that we one day may be able to regenerate cartilage in the knee. Right now, researchers have been successful in growing new cartilage in Petrie dishes. “

For more information on Dr. Brian Cole and his expertise on cartilage restoration, check his web site at www.briancolemd.com

Dr. Gabe Mirkin, a board-certified physician of sports medicine, adds that the claims that injecting substances such as hyaluronic acid and platelet rich plasma or PRP to regrow cartilage are “highly debatable since the literature is so conflicting.”

“Studies have shown that these injectables do not work in the long term and while they may have an anti-inflammatory effect, research shows that lifestyle changes such as diet and exercise is more effective than surgery,” he tells Newsmax Health. “What is promising is the regeneration of cartilage with genetically modified stem cells.”