

Business Plus Spotlight

Boulder County Business, Magnified.

New Hope for Osteoarthritis Patients





Dr. Joanne Halbrecht, head of the Boulder Regenerative Medicine division of Boulder Institute for Sports Medicine, has successfully treated hundreds of patients with osteoarthritis. Her comprehensive treatment philosophy includes diet, exercise, weight loss, bracing, medication, injections and regenerative medicine before surgery is considered.

Orthobiologics Offers New Hope for Osteoarthritis Patients

“Osteoarthritis, the most commonly occurring type of arthritis, can be caused by genetics, obesity, trauma, overuse of the joints and age.”

across the joint, losing weight can both reduce or relieve arthritis pain, as well as slow down the progression.”

High-glycemic index foods (such as white rice, white flour, potatoes and sugar) increase inflammation, Dr. Halbrecht explains. She recommends a diet that emphasizes foods with a low glycemic index, such as the South Beach or Mediterranean diet. Studies show that patients with osteoarthritis who are sedentary have comparable pain to those who participate in high impact activities. So, it is better to have a moderate or low impact level of activity. “I recommend anything on wheels or in water,” she says.

Anti-inflammatory injections can help, too

Medication and injections play their part in a recovery plan, too. Anti-inflammatory medications, such as over-the-counter Aleve and prescription NSAIDs, are very helpful to decrease pain and inflammation. Tylenol is not anti-inflammatory and only works for pain relief. Viscosupplementation (informally referred to as a “lube job”) involves injecting a substance called hyaluronic acid (HA) into the joint.

“I find that using a series of three to five injections is more effective than a single shot. HA works by decreasing inflammation and stimulating production of a more viscous fluid in the joint. Depending on the insurance, this can be

irregularity in the cartilage surface irritates joints and causes inflammation.”

Osteoarthritis is primarily diagnosed using x-rays which may show a decrease in the joint space. If the condition has been ongoing for an extended time, spurs and cysts in the bone may have formed. An MRI, which shows soft tissue and cartilage, can also be useful in detecting early arthritis when x-rays don’t indicate a problem.

Successful treatment includes lifestyle changes and expert medical care

Treatment for this condition depends on what is revealed through a physical examination. Your personal care will take into account your degree of pain, symptoms and disability.

“A stiff joint is a painful joint,” says Dr. Halbrecht. “I have found that physical therapy, which restores range of motion and more normal biomechanics, can significantly reduce pain in an arthritic joint. Because excess body weight increases load stress

of the Boulder Regenerative Medicine division at Boulder Institute for Sports Medicine, has successfully treated hundreds of arthritis patients to relieve their symptoms and, more importantly, address the causes of their condition. In a recent interview, Dr. Halbrecht, orthopedic surgeon and sports medicine specialist, explained therapy options and how innovative cell therapy is transforming the way the most common form of arthritis can be treated.

Osteoarthritis is the most common form of arthritis

“Osteoarthritis, the most commonly occurring type of arthritis, can be caused by genetics, obesity, trauma, overuse of the joints and age,” Dr. Halbrecht says. “The joints become inflamed when cartilage – the tissue that covers the ends of the bones – breaks down. First, the cartilage becomes soft, then it breaks apart and eventually it is so worn away it exposes bare bone. This

Local orthopedic surgeon and renowned expert in regenerative medicine, Dr. Joanne Halbrecht, provides innovative treatment options for arthritis care.

By Paul Hackett

Photos courtesy of Boulder Institute for Sports Medicine

As a rule, most of us are living longer, healthier lives than our ancestors did just a few generations ago. That’s great news, of course. But it also raises the bar on staying in the best physical condition we possibly can.

If you experience sore joints and stiffness when you wake in the morning, or feel pain when you exercise or walk up and down stairs, these may be the warning signs of arthritis. Millions of people of all ages live with some type of arthritis, but with the right care, many of them wouldn’t have to.

Dr. Joanne Halbrecht, head



If you experience stiff and sore joints when you wake in the morning, feel pain with increased activity or going up and down stairs, you may have osteoarthritis.

done one to two times a year. In my experience, pain is relieved on average for eight months, but can last as long as two years,” explains Dr. Halbrecht. “I reserve steroid injections for more advanced arthritis. Corticosteroids decrease inflammation and can be given once every three months, but no more than three times per year.”

A brace can also help people with osteoarthritis. Dr. Halbrecht prescribes an “unloader” brace for patients who have arthritis that is localized to one side of the knee. The brace has a hinge that reduces the stress load on the more damaged side of the knee. This can relieve pain, particularly with weight bearing and sports.

For actual bone-on-bone arthritis that has not responded to conservative treatment and injections, a total joint replacement is recommended. This procedure removes the damaged cartilage and replaces it with plastic and metal. Ninety-five percent of those

who have knee replacements are satisfied with their results and an impressive 85 percent are still doing well after 20 years.

Orthobiologics therapy uses your own body's cells to heal

Dr. Halbrecht is an innovator in the groundbreaking use of “orthobiologics.” She has earned a worldwide reputation as an expert in regenerative medicine and stem cell therapy and has appeared on CBS television’s American Health Front and NBC 9News in Denver to speak on the subject.

Orthobiologics are substances from the human body that are used in orthopedics to aid in the reparative process or healing of acute injuries or chronic conditions. Those substances include platelet rich plasma (PRP), fat, bone marrow, amniotic and umbilical cord tissue. “PRP, amniotic tissue and umbilical cord blood are not considered products that contain stem cells. Both bone marrow and fat have live stem cells,”

says Dr. Halbrecht. “Stem cells are anti-inflammatory, promote the growth of blood vessels, inhibit scar tissue formation and stimulate cell division or tissue regeneration. They are actually attracted to inflammation and injury and release proteins that affect the surrounding tissue.”

Medical studies have shown significant decrease in pain and beneficial effects on the joint tissue including increased thickness of cartilage on MRI in patients with arthritis who have received bone marrow and fat cell therapy.

Dr. Halbrecht uses fat harvested from the patient, because it has up to 500 times more stem cells than bone marrow. It also contains growth factors that can decrease inflammation and promote tissue growth. The number of stem cells in fat remains constant with age, whereas the number of stem cells in bone marrow sharply declines with age, she says.

These fat cells are harvested from the patient’s belly or buttock area during an in-office visit using local anesthetic. The procedure is like a mini liposuction. Dr. Halbrecht uses an FDA-approved device approved for the use in orthopedic surgery to purify the fat in the office. She then reinjects the fat cells in the afflicted areas. The entire procedure takes only about an hour.

The results are in

If you want to live well, you need to be well. “My results

have been comparable to the studies published on this type of cell therapy,” Dr. Halbrecht reports. “I have treated hundreds of patients over the past three years and find that the success of the fat cell procedure is dependent upon patient selection and a comprehensive treatment plan that includes physical therapy, appropriate diet, exercise and weight loss.”

If you think you may have arthritis, you should seek evaluation by an orthopedic surgeon. They are the most experienced and knowledgeable in the conservative and surgical treatment of arthritis and can give you the best treatment options.

“Be wary of stem cell clinics that only offer injections and do not have clinical or human studies that show that the product they use is beneficial in those with osteoarthritis,” Dr. Halbrecht warns.



Boulder Regenerative Medicine

A DIVISION OF BOULDER INSTITUTE FOR SPORTS MEDICINE, P.C.

To learn more about how Dr. Joanne Halbrecht and Boulder Regenerative Medicine can help alleviate osteoarthritis, visit BoulderInstitute.com or call 303.449.8807.

Clinic hours:
Monday - Thursday,
8:30 a.m. to 5 p.m.;
Friday, 8:30 a.m. to 3 p.m.

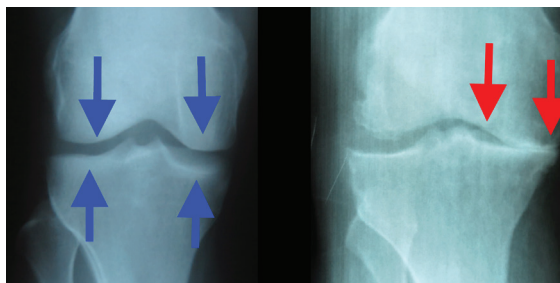
3000 Center Green Drive,
Suite 150, Boulder



Boulder Institute for Sports Medicine, P.C.



Dr. Halbrecht is an innovator in the groundbreaking use of “orthobiologics.”



Knee X-Rays. (Left: Normal joint space. Right: Joint space loss in arthritic knee.)