



How Regenerative Medicine & Platelet Rich Plasma can relieve joint pain without surgery

Do you have knee pain? If so you are not alone. Some estimates cite that up to 20% of all adult men suffer from knee pain, with incidence increasing with age and the onset of arthritis. Women are worse. Some experts estimate that 25% of women live with knee pain. Many people have given up hope of playing fun recreational sports like golf, tennis or pickle ball because of joint pain. Also because of concerns of patients outliving the lifespan of an artificial knee or hip joint, many orthopedic surgeons try to delay joint replacement surgery until the patient is in their 50s. This creates a huge problem for those patients in their 30s to 50s.

Thankfully, there is new hope for those with arthritic knees and hips with the emergence over the last 10 years of a new specialty called "regenerative medicine" which uses the body's own healing properties to relieve joint pain and heal injured tissues.

Regenerative medicine accelerates the body's own natural healing powers. This can include PRP (Platelet Rich Plasma), stem cell therapy and A2M therapy that blocks the onset of arthritis.

Stem Cell Therapy

There can be some misunderstanding related to stem cell therapy, with some people thinking that stem cells are harvested from an outside source. That

is not the case with stem cell therapy at Celebration Orthopaedics, explains Dr. Brad Homan, an orthopedic surgeon who is proficient in regenerative medicine.

"We harvest fat from a person's own body, spin it down with a centrifuge and then inject the person's own stem cells back into their arthritic knee joint the same day," Dr. Homan explains. "This condensed fat provides the necessary cushion and can help the joint cartilage begin some level of healing. Within this extricated fat are important living stem cells that provide a healing function to damaged cartilage and meniscus."

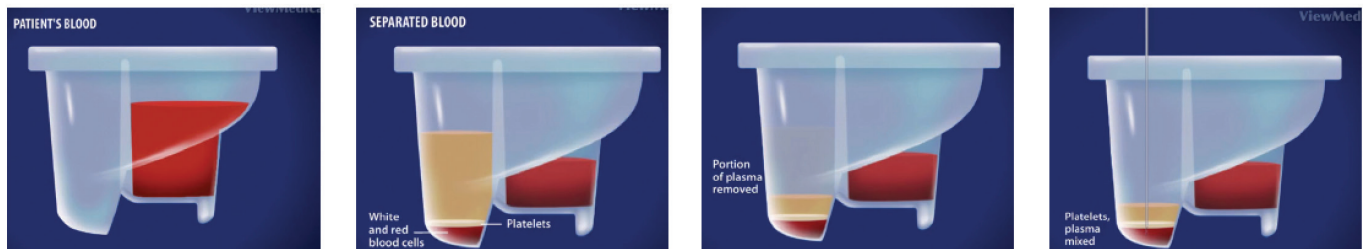
"Stem cell therapy helps thousands of weekend athletes to enjoy movement without pain," Dr. Homan adds. "The person is able to buy 10 or 20 years with regenerative medicine to reach that age where they have a good chance of outliving the lifespan of that artificial joint. The result is one joint replacement surgery rather than several risky re-do surgeries at an older age."

There is huge demand currently in the U.S. for stem cell therapy and regenerative medicine when it is provided correctly. While the treatments are not yet covered by insurance, and the treatment can cost a few thousand dollars out of pocket, thousands of these stem-cell patients have found that it works and they are back to activity without major surgery. In this

sense, the non-surgical treatment option saves them the cost of joint replacement and all the associated rehab costs post surgery. As with any medical advance, it may take insurance companies a couple years to realize the cost savings in covering Regenerative Medicine procedures.



Dr. Brad Homan at Celebration Orthopaedics is a fellowship-trained orthopedic surgeon — the highest level of medical education in the U.S. He specializes in sports medicine and arthroscopy. In addition, Dr. Homan is proficient in the specialty of Regenerative Medicine, which includes the use of PRP therapy and stem cell therapy as a non-surgical treatment option for joint pain and injury.



HOW PRP THERAPY IS DONE: A small amount of blood is drawn from the arm and then placed into a centrifuge which spins the blood to separate it into layers based on weight. Because red blood cells are the heaviest, those go to the bottom of the container. The "plasma" is the lightest and floats to the top. The platelets settle in between the two. This middle layer with the concentrated platelets is collected and then prepared for use in the injection into the injured tissue or joint. The entire process typically takes less than an hour. If necessary, a numbing agent like lidocaine may be used to decrease any pain at the injection site.

Platelet rich plasma (PRP)

When injury occurs in the body, blood flow is needed to supply the necessary cells and nutrients to drive the healing process. Platelet rich plasma (PRP) therapy accelerates the natural healing process. PRP can help patients with painful osteoarthritis or tendonitis as well as acute and chronic muscle injuries, meniscus and labrum injuries, ligament injuries and plantar fasciitis.

First, a small amount of blood is drawn from the arm. The blood is placed into a centrifuge which spins the blood fast enough to separate it into layers based on weight. Red blood cells settle to the bottom because they are heavier, plasma floats

to the top because it's lightest. Platelets settle in between the two. The middle layer containing the concentrated platelets is then collected and is then injected into the problematic joint or tissue to speed healing. The whole process typically takes less than one hour. Because the injected platelets are produced from your own body, there is no concern for rejection or disease transmission. Many famous athletes — PGA's Tiger Woods, NBA's Kobe Bryant and Steph Curry, MLB's Alex Rodriguez, tennis star Rafael Nadal, and several others — rely

on PRP for various problems.

Alpha-2-Macroglobulin (A2M)

Alpha-2-Macroglobulin is a protein naturally occurring in a person's plasma that blocks the mechanism that creates arthritis in the body. By harvesting a patient's A2M and re-injecting the super concentrated A2M mixture into a diseased joint, the progression of osteoarthritis can be blocked. This also can prevent further loss of cartilage to reduce pain and inflammation.

PRP therapy & stem cell treatment at Celebration Orthopaedics



Celebration Orthopaedics is pleased to provide patients the latest non-surgical Regenerative Medicine treatment options to relieve joint pain symptoms. These therapies can delay knee and hip joint replacement surgery for arthritis until later in life when they are less likely to outlive the lifespan of an artificial joint.

"Regenerative medicine therapies have shown great promise in also treating many conditions outside of joint pain, as you are strengthening the body's own natural healing systems," explains Dr. Homan. "At Celebration Orthopaedics, we use Platelet

Rich Plasma, cellular-based therapies, and alpha 2 macroglobulin for regenerative medicine treatments," Dr. Brad Homan adds. "We are able to harvest and inject adipose-derived cells and bone marrow aspirate to speed the body's own healing capabilities."

To see if you are a candidate for PRP or stem cell therapy for joint pain, call Celebration Orthopaedics at 321-939-0222 and request an appointment with a Regenerative Medicine Specialist. More information is at CelebOrtho.com.

WHAT DOESN'T WORK:

One of the problems where there is a new medical advance, charlatans can take advantage of patients who don't research to find legitimate specialists in regenerative medicine.

Accordingly, the FDA in 2021 put out a warning that some clinics were bilking patients for "regenerative medicine" when they were not providing any competence or specialization. The FDA warned that these charlatans were injecting dead stem cells harvested from other sources and charging patients high fees for something that doesn't relieve joint pain or provide any healing.

BENEFITS OF REGENERATIVE MEDICINE:

How regenerative medicine and stem cell treatment can delay the need for joint replacement surgery

In 2018, the Mayo Clinic produced a definitive study showing the benefit of stem cells in treating arthritic joints. Over the last 10 years, regenerative medicine has now become a respected nonsurgical option to explore before surgery. Here are the benefits of Regenerative Medicine:

1. It's a minimally invasive outpatient procedure not requiring a hospital
2. There are less complications and risks than surgery
3. There is minimal post procedural recovery discomfort and time
4. There is no use of general anesthesia
5. There is no risk of rejection since the stem cells are your own, harvested from your own body
6. Stem cell treatment has proven to be effective for repairing sprained knees, tendon injuries, shoulder injuries, and other orthopedic ligament issues
7. It can delay knee and hip joint replacement surgery for the patient's benefit



CELEBRATION ORTHOPAEDICS

Appointments & Referrals:
321-939-0222
CelebOrtho.com
2954 Mallory Circle, Suite 101
Celebration, FL 34747
Email: info@celebortho.com
Celebrating 25 years of patient care