Stem Cells and Growth Factors for Knees: Ready for Prime Time?

Dr. Kevin Plancher with Plancher Orthopaedics & Sports Medicine with tips on understanding the new investigational treatment option for knee conditions

NEW YORK and GREENWICH, Conn. (PRWEB) February 27, 2018 -- As science begins to unlock the powers of stem cells and growth factors – which can grow into any type of cells in your body – one of the most-studied areas of use has been in the knee. It is hoped that this investigational treatment may help improve injured or arthritic knees.

Orthopaedic surgeon Kevin D. Plancher, MD, founder of Plancher Orthopaedics & Sports Medicine, finds himself often educating patients on the promising developments in stem cell and growth factor therapy for orthopaedic conditions, especially in the knees. “Patients have usually heard encouraging information about these treatments, and it’s an exciting area of growth,” he says. “I’m administering these treatments to my patients more frequently than ever.”

More than 600 stem cell clinics now exist in the United States, offering one type or another of stem cell therapy to an estimated 100,000 or more patients, according to the Mayo Clinic. But what exactly are stem cells and these growth factors? When used for orthopaedic purposes, these potent cells may be taken from the bone marrow, fat tissue, or blood, offering possible regenerative capabilities in the area into which they’re later injected.

“Stem cells are probably best known as a treatment for cancer, but they’re also used in a wide range of other conditions,” Dr. Plancher explains. “An impressive body of research is being compiled indicating that stem cells and growth factors may significantly improve knee pain and function in certain patients. Unfortunately, much of the research is lagging behind all the clinical uses,” Dr. Plancher cautions his patients.

Tips on knee conditions that may benefit

One of the most common sites of osteoarthritis – the wear-and-tear type of arthritis affecting about 30 million Americans – is in the knees, Dr. Plancher notes. And it’s here that stem cell therapy seems most promising, with research indicating it’s quite safe but long term outcomes studies have not been done.

Besides arthritis, what other knee conditions are being treated with these treatments? They include:
- Ligament and knee instability tears (all)
- Patellofemoral syndrome (pain at the front of the knee/around the kneecap)
- Knee bursitis
- Patellar tendinitis (an injury to the tendon connecting the kneecap to the shinbone)
- Knee instability
- Cartilage damage

In all of these pain-producing knee conditions, research is suggesting promising effects, Dr. Plancher says. Scientists are now zeroing in on why these improvements come about – whether these treatments are hindering inflammation in the knee, regenerating worn-out tissues, or releasing substances affecting nearby cells.

How Are These Treatments Performed
One method is to extract cells from one body area (often the marrow in the hip) using a special needle and ultrasound or x-ray guidance in the operating room.

After taking the cells, they are centrifuged, which removes other cells that aren’t utilized. The purified cells are then injected into the knee tissues being treated while also using ultrasound or other imaging guidance. This procedure is called BMAC, also known as Bone Marrow Aspirate Concentrate.

“This straightforward, same-day procedure is designed to slow the breakdown of parts in the knee that are causing a patient’s pain and dysfunction in their knee,” says Dr. Plancher, also a Clinical Professor in Orthopaedics at Albert Einstein College of Medicine in New York. “While it doesn’t appear to be a ‘cure’ or have permanent effects – meaning patients need to sometimes undergo repeat injections – this treatment can stave off much more invasive approaches, including knee replacement surgery.”

He added, “there are other ways of administering these cells or growth factors can be done in the office. I’m excited to see how research continues to reinforce the benefits of all these types of innovate therapies.”

Kevin D. Plancher, MD, MPH, is a board-certified orthopaedic surgeon and the founder of Plancher Orthopaedics & Sports Medicine.

Plancher Orthopaedics & Sports Medicine is a comprehensive orthopaedics and sports medicine practice with offices in New York City and Greenwich, CT. www.plancherortho.com
Contact Information
Melissa Chefec
MCPR, LLC
+1 2039686625

Online Web 2.0 Version
You can read the online version of this press release here.