Looking Toward the Future with RECLAIM Trial Results

RECLAIM, (REcycled CartiLage Auto/Allo Implantation), is a one-stage arthroscopic knee cartilage restoration procedure in clinical trials at Mayo Clinic – one of the few places in the world to offer it. This outpatient procedure, currently available to trial participants only, uses regenerative medicine; damaged tissues and cells removed from the patient's knee during debridement are digested down to the micron level and allogenic signaling cells from Mayo's donor bank are added. These signaling cells stimulate cartilage regeneration in a faster manner, helping the cartilage grow. After 45 minutes to an hour, those cells are then replanted into the knee, and patients are generally able to return to normal activities in three to four months.

Promising results have shown to be comparable to, or better than, other cell therapies, with trial participants achieving normal post-surgery function about six months quicker than those who did not have the RECLAIM procedure. DNA analysis used to test both for the patient's own cartilage cells and the allogenic signaling cells at one-year post-procedure show the final product to be only the patient's own cells. "This was some of the initial proof," says Aaron Krych, M.D., orthopedic surgeon, co-director, Mayo Clinic Orthopedics and Sports Medicine, "that stem cells provide some of the stimulation and improve what the body's own cells can do."

Because RECLAIM has shown to be safe, to work for cartilage in the knee, and is now an investigational new drug in a study under the FDA, "we have the opportunity to use this research as a stepping-stone for other projects," <u>Daniel Saris, M.D., Ph.D.</u>, orthopedic surgeon, <u>Mayo Clinic Orthopedics and Sports Medicine</u>, says. As such, Mayo Orthopedic and Sports Medicine surgeons are leveraging the technique into other areas.

• Clinical trial for hip cartilage repair

Having had promising results in the knee using the RECLAIM single stage cartilage repair technique, Mayo Clinic Orthopedics and Sports Medicine surgeons will be starting an FDA supervised trial for cartilage repair in the hip, which has never been done before. "By putting those cartilage cells back into the hip, over time, those cells will grow into new and healthy cartilage in the socket," explains Dr. Krych. The objectives of the study are to assess RECLAIM's safety and its effect on pain, function, and bone and cartilage structures of the target hip.

Looking toward the future

As trial participants are followed and outcomes tracked, surgeons look to the future to discover if RECLAIM can be utilized with other joints, tissues or even muscle defects. "We're able to recycle meniscus tissue, and we think that some of the RECLAIM technique can be applied to improving meniscus transplant surgery," says Dr. Saris. "These are exciting improvements that that may be available five or 10 years from now."

Mayo Clinic has a longstanding tradition of trying to find answers that weren't there before, in a safe way, "while pushing boundaries as we're doing so," says Dr. Saris. Motivated to do better things every say, Mayo Clinic approaches innovation with the hope of pioneering techniques and treatments that can provide the best possible care to all patients. And, with procedures like RECLAIM, Mayo Clinic Orthopedics and Sports Medicine is committed to researching and developing techniques that keep people at their highest quality of activity, for as long as they'd like.

Newsletter and Social Media Headlines and CTA's:

Primary

Headline:

Exciting updates on RECLAIM trials for knee cartilage restoration

Blurb:

Promising results of RECLAIM trials give the opportunity for further research and development of single stage cartilage repair

CTA:

How RECLAIM trial results help Mayo look toward the future

Secondary

Headline:

RECLAIM trial for knee cartilage restoration helps Mayo look toward the future

Blurb:

RECLAIM trial results allow for further research and development of single stage cartilage repair

Button:

Find out more