

Stem cell treatment for osteoarthritis of the knee may help rebuild lost cartilage

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Recent studies employing adult stem cells obtained from bone marrow and fat have been used in patients suffering from osteoarthritis of the knee. Results have indicated not only symptomatic improvement but also suggest that cartilage healing and regeneration may be taking place.

According to Director, Dr. Nathan Wei of the Arthritis Treatment Center, "Osteoarthritis options in the past have been limited to symptom relief. We are now entering an era where we have therapies that may also rebuild lost cartilage."

Osteoarthritis (OA) of the knee affects more than 20 million Americans. It is a disease due to loss of cartilage, the gristle that caps the ends of long bones and provides cushioning and shock absorption.

He goes on to say, "by administering adult stem cells, in a certain fashion, we may be able to restore lost cartilage. While this action has been demonstrated in multiple animal models, it has only been described in anecdotal reports in humans. Fortunately, we are now conducting clinical studies that are much better controlled and more scientifically valid."

Dr. Wei adds, "The positive effect on arthritis is not only due to multiplication, division, and transformation of the stem cell into cartilage, but it is also due to the fact the stem cell releases proteins that attract other reparative cells to the area. This is called the 'paracrine' effect."

"We are excited about the early results of our investigation and hope the results will continue to be positive. If so, I hope that knee replacement surgery might become a thing of the past," he concludes.

Dr. Wei is a board-certified rheumatologist and regenerative medicine expert. He is director of the Arthritis Treatment Center located in Frederick, Maryland.

Source:
Arthritis Treatment Center
