

Autologous adipose-derived stromal cells may ease knee OA

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(HealthDay)—For patients with knee osteoarthritis, a single intra-

articular injection of autologous adipose-derived stromal cells (ASCs) can reduce pain and inflammation, according to research published online May 23 in *Stem Cells Translational Medicine*.

Christian Jorgensen, M.D., Ph.D., head of the clinical unit for osteoarticular diseases at Lapeyronie University Hospital in Montpellier, France, and colleagues focused on 18 French and German men and women, aged 50 to 75, with severe [knee osteoarthritis](#) for at least a year before joining the study. Between April 2012 and December 2013, all of the [patients](#) first underwent liposuction to extract fat-derived samples of specific stem cells. One-third of the patients received a single, low-dose [injection](#) of autologous ASCs directly into their knee. Another third received a medium-dose injection, and the remaining group received a high-dose injection.

After six months, the study team found that all three groups showed improvements in terms of pain, function, and mobility. However, only those in the low-dose group were determined to have statistically significant improvements in terms of both [knee pain](#) and function recovery. Apart from one case of chest pain (about three months after the injection), only a few patients experienced mild side effects.

"Our data suggest that the intra-articular injection of ASCs is a safe therapeutic alternative to treat severe knee osteoarthritis patients," the authors write. "A placebo-controlled double-blind phase IIb study is being initiated to assess clinical and structural efficacy."

More information: [Abstract](#)

[Full Text](#)

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