

# Microfragmented adipose tissue injection beneficial for knee OA

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For patients with knee osteoarthritis (KOA), microfragmented adipose

tissue (MFAT) injection with arthroscopic surgery is associated with improved midterm clinical outcomes, according to a study published online Dec. 26 in the *World Journal of Stem Cells*.

Cong-Zi Wu, from the First Affiliated Hospital of Zhejiang Chinese Medical University in Hangzhou, and colleagues examined the efficacy and safety of MFAT with arthroscopic surgery in a randomized multicenter trial conducted in 10 hospitals involving 302 [patients](#) with KOA (Kellgren-Lawrence grades 2 to 3). Participants were randomly assigned to MFAT or the [control group](#) and received MFAT or hyaluronic acid following arthroscopic surgery respectively (151 patients in each group).

The researchers found significant differences in changes in the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score (including the three subscale scores), visual analog scale (VAS) [pain score](#), and Lequesne index score at the 24-month mark, as well as when comparing values at the posttreatment visit with baseline.

At all follow-ups, consistent, significant decreases in the WOMAC pain scores and VAS scores were seen in the MFAT group compared with the control group. At 12 and 24 months, there were significant differences between the groups in the WOMAC stiffness score, WOMAC function score, and Lequesne index score. At 24 months, the Whole-Organ Magnetic Resonance Imaging Score did not significantly differ between the groups.

"We demonstrated that MFAT injection combined with arthroscopic surgery had better clinical efficacy than the control group for treating KOA at a mid-term follow-up and could be a potential therapeutic approach for patients with KOA," the authors write.

**More information:** Cong-Zi Wu et al, Mid-term outcomes of

microfragmented adipose tissue plus arthroscopic surgery for knee osteoarthritis: A randomized, active-control, multicenter clinical trial, *World Journal of Stem Cells* (2023). [DOI: 10.4252/wjsc.v15.i12.1063](https://doi.org/10.4252/wjsc.v15.i12.1063)

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