



How much effective are supplements in the treatment of osteoarthritis?

Takviyeler osteoartrit tedavisinde ne kadar etkilidir?

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Osteoarthritis (OA) is the most common form of arthritis and the leading cause of disability among middle-aged and elderly people. The pathogenesis and treatment of OA are very complex.^[1,2]

Many people with OA use supplements in their diet for the treatment of OA. Glucosamine, chondroitin and methylsulfonylmethane (MSM) are the most well-known. These supplements are available in pharmacies and health food stores without a prescription. Some patients and physicians accepted these supplements as a miracle treatment for OA. However, there are no published randomized controlled trials to confirm their long-term safety and effectiveness.

Lupis et al.^[3] conducted a study comparing glucosamine-chondroitin sulfate with or without MSM in grade I-II knee OA. They concluded that combination of glucosamine-chondroitin sulfate-MSM showed clinical benefit for patients compared with glucosamine-chondroitin sulfate and placebo.

However, Ameye and Chee^[4] reported a systematic review of a range of nutraceuticals in OA including MSM and concluded that MSM showed "moderate" evidence of efficacy. Moreover, Brien et al.^[5] concluded in a meta-analysis that MSM is not clinically effective in the reduction of pain in the treatment of OA, and no definitive conclusions can currently be drawn from the data due to the mixed findings and the use of inadequate dosing periods. They recommended further investigation addressing methodological concerns including optimal dosage and treatment duration.

Recently, Liu et al.^[6] conducted a systematic review and meta-analysis on dietary supplements

for treating OA. They showed that supplements provided moderate and clinically meaningful treatment effects on pain and function in patients with hand, hip or knee OA at short-term, although the quality of evidence was very low. Widely-used supplements such as glucosamine and chondroitin were either ineffective or showed small and clinically unimportant treatment effects.

In conclusion, there is no strong evidence to know how much effective these supplements are in the treatment of OA.

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