Semaglutide helps mitigate osteoarthritis among persons with obesity

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Knee osteoarthritis is a common chronic condition for the elderly population. A study published in 2023 found the prevalence of osteoarthritis ranges from 14.6% in China. This percentage rises to 35.1% among those who are aged over 50 years in Korea (Giorgino et al., 2023). There are several known risk factors associated with osteoarthritis, one of which is obesity. One research published in 2022 found that obesity increased the risk for osteoarthritis about 3 times (Allen et al., 2022). Therefore, removing or mitigating the risk factor of obesity is a promising strategy to manage knee osteoarthritis.

This is supported by a recently published randomized clinical trial investigating the efficacy of GLP-1 agonist on WOMAC pain score among obesity patients with knee osteoarthritis who were randomized 2:1 to either one-weekly semaglutide (2.4 mg) or placebo. At week 68, the mean change in body weight from baseline was -13.7% vs -3.2% ($p < 0.001$). The mean WOMAC pain score at week 68 was -41.7 vs -27.5 ($p < 0.001$), respectively (Bliddal et al., 2024). The authors conclude that semaglutide is efficacious in mitigating the pain symptoms of knee osteoarthritis.

In conclusion, one piece of evidence shows it is achievable to treat knee osteoarthritis by alleviating the weight of obese patients. More evidence is needed to confirm potential outcomes in non-obese patients.

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