Associations Between WOMAC Function Scores and Changes in Sedentary Bouts Following a ZILRETTA Injection in Individuals with Radiographic Knee Osteoarthritis

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BACKGROUND: Knee osteoarthritis (OA) patients experience functional deficits and engage in greater sedentary behavior in comparison to healthy individuals. Intra-articular corticosteroid injections are a course of treatment prescribed to reduce pain and improve overall function. It is unknown whether changes in sedentary behavior after receiving a corticosteroid injection are linked to perceived physical function.
PURPOSE: To determine associations between WOMAC Function subscale scores and changes in sedentary time from baseline to 4 and 8 weeks in individuals with knee OA after receiving a ZILRETTA corticosteroid injection.
METHODS: 30 patients (63.5±7.42 yrs; 28.59±3.44 kg/m^2) with radiographic knee OA completed the WOMAC Function subscale and the average number of daily sedentary bouts was assessed from ActiGraph GT9X Link at baseline, 4-weeks, and 8-weeks-post-injection. Associations between WOMAC Function scores and the Δsedentary bouts were measured using Pearson product-moment correlations.
RESULTS: No statistically significant associations were observed between WOMAC scores and Δsedentary bouts from baseline to 4 weeks ($r=0.102, p=0.598$) and 8 weeks ($r=0.283, p=0.160$).
CONCLUSION: Changes in sedentary bouts following a ZILRETTA injection were minimal and were not linked to WOMAC Function scores. Future studies should consider the effectiveness of combined corticosteroid injections and activity promotion on self-reported physical function.