

Sustained Treatment in a Medical Weight Management Program Results in Increased Weight Loss and Total Joint Arthroplasty Surgery in Morbidly Obese Patients

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INTRODUCTION: Obesity is the most common modifiable risk factor necessitating medical optimization prior to total joint arthroplasty surgery. At our institution, patients with a BMI >40 are referred to an interdisciplinary medical weight management program. The purpose of this study is to examine whether sustained treatment in the program leads to increased weight loss, continued orthopaedic follow up, and an increased likelihood of undergoing total joint arthroplasty surgery.

METHODS: A retrospective review of the medical record identified 136 patients with hip or knee arthritis and a BMI >40 who were referred to our medical weight management clinic over a two-year period. These patients were divided into three groups: those that failed to participate, those with a single visit, and those who underwent sustained treatment. Records were reviewed for demographic data, treatment interventions, and weight loss and follow-up outcome measures. Continuous variables were assessed with t-test, and Fisher's exact test was performed for categorical variables.

RESULTS:

Patients with sustained treatment lost an average of 14 pounds versus 1.3 in those who attended a single appointment ($p=0.01$). In total, 61.1% of patients with sustained treatment continued to follow up in the orthopaedic clinic, compared to 27% of patients who did not participate ($p<0.01$). Some 22.2% of patients with sustained treatment eventually underwent total joint arthroplasty surgery compared with 6.3% of patients who did not participate ($p=0.02$). A total of 88.9% of patients with sustained treatment were treated with novel weight loss medications, with semaglutide the most popular choice.

DISCUSSION AND CONCLUSION:

Morbidly obese patients that engage in sustained treatment in an interdisciplinary medical weight management program experience greater weight loss, improved orthopaedic follow-up rates, and a higher rate of total joint arthroplasty surgery when compared to those with minimal or no participation. The use of novel weight loss medications in achieving optimal outcomes in this cohort remains promising.