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8. Prevalence of Joint Pain Before and After Bariatric Surgery and Impact on Physical Activity

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Objectives: Consistent physical activity (PA) is one of the strongest predictors of successful long term weight loss maintenance. However, joint pain is common among severely obese patients and is a significant barrier to regular PA. Our goal was to compare the prevalence of hip, knee, and back/other pain before and after bariatric surgery and explore interrelationships among joint pain, BMI, and PA.

Method: Data were drawn from a convenience sample of adults undergoing bariatric surgery at an urban academic center. In a phone survey, participants reported whether they had experienced knee, hip, and/or back/other pain prior to surgery, and changes in joint pain post surgery. We compared BMI and PA by pain status (improved vs. same/worse) using t-tests and chi square.

Results: The 285 adults had undergone surgery a mean (SD) of 10 (3) years earlier. At follow up [FU], participants had a mean (SD) age of 51 (10), BMI of 34.4 (8.4), and change in BMI of -19.0 (9.4); 191 (68%) had a BMI \geq 30. Prior to surgery, 21-45% reported joint pain; at FU, 123 (43%) reported no pain; 80 (28%); 66 (23%); and 16 (6%) reported pain in 1,2, or 3 joint regions, and 62 (22%) were on NSAIDs or analgesics. Participants who reported having less joint pain had greater reductions in BMI, and a significantly larger proportion reported being more active than prior to surgery (Table). Those with improved knee and back pain were also more likely to meet recommended PA guidelines.

Conclusion: Joint pain was common among bariatric surgery patients and had improved in 34-40% even 10 years later. Improvements in pain were associated with greater reductions in BMI, greater likelihood of being more active, and of meeting PA guidelines. For the >60% with similar/worse joint pain, effective pain management strategies may be needed to facilitate reaching PA goals.