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Effective Pain Information Pre-operatively is Associated with Improved Functional Gain after Total Joint Replacement

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Objective: We evaluated receipt of pre-operative pain management education in a national prospective cohort on post-operative pain and function.

Methods: Preoperative, 2 week and 6 month postoperative data from a nationally representative cohort of 1404 primary unilateral TJR patients with a date of surgery between May 2011 and December 2014. Data included demographics, comorbid conditions, operative joint pain severity (HOOS/KOOS), musculoskeletal disease burden, physical function (SF36 PCS), and mental health (SF36 MCS). At 2 weeks post-op, patients were asked if they had received information prior to surgery about pain management options and if so, how helpful the information was. Additionally, patients were asked about use of non-medication methods to relieve operative joint pain. Descriptive statistics were performed.

Results: One third reported not receiving information about pain management; an additional 11% did not find it helpful. There were no differences pre-operatively in demographics, comorbid conditions, operative joint pain severity, musculoskeletal disease burden, SF36 PCS and MCS between those who received information and those who did not. Patients who received information about pain management options were more likely to use non-medication methods to relieve operative joint pain ($p<0.000$). They reported less current pain ($p=0.02$) and maximum pain ($p=0.03$) in their operative joint at 2 weeks post-op. At 6 months post-op, patients who reported not receiving information about pain management had statistically lower physical function scores that those receiving information ($p=0.04$). There was no difference in HOOS/KOOS pain scores 6 months post-op.

Conclusion: More than 40% of TJR patients in this study reported that they did not receive or received unhelpful information regarding post-op pain management options, highlighting a need for more consistent patient education. In this study, the lack of pain management information appears to negatively impact 6 month post-operative function.

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