EARLY AMBULATION FOR TOTAL JOINT REPLACEMENT PATIENTS

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Abstract

Identification of the problem – Overview

Current evidence has shown that early post-operative mobilization of total knee and hip arthroplasty patients can result in a decreased length of hospital stay. Patients undergoing total knee and hip arthroplasty on an Orthopedic Surgical Unit at San Antonio Military Medical Center were receiving physical therapy on different days depending on the time of arrival to the unit from surgery. Interdisciplinary collaboration for these patients at times lacked communication and total joint patients were receiving different ambulation protocol. Evidence-based practice shows that by standardizing care of such patients discharge to home/rehab is possible earlier than previously seen.

EBP Question/Purpose

Does rapid mobilization consisting of physical therapy on the day of surgery affect the hospital length of stay for patients undergoing total knee and hip replacement surgery? To improve discharge time of total joint patients by implementing early ambulation protocol for all knee/hip arthroplasty surgery patients.

Methods/Evidence

Using the IOWA model a focused question was developed and literature review was completed. During the timeframe of June to December 2015, 216 total knee and hip arthroplasty charts were reviewed monthly. Surgery date, patient arrival time to ward, date and time physical therapy ambulated the patient and the date the patient was discharged home were identified. We compared discharge dates for patients who had post-operative zero rapid rehabilitation with physical therapy and patients who had routine physical therapy on post-operative day one.

Evidence has shown that early mobilization within 24 hours of operation on total joint arthroplasty patients can result in a reduced length of stay of about 1.8 days.

Significance of Findings/Outcomes
139 patients received rapid rehabilitation on post-operative day zero and 76 patients received rehabilitation on post-operative day one. The length of stay for rapid rehabilitation patients who were discharged directly home was 1.3 days compared to post-operative day one rehabilitation was 2.1 days. Cost of an occupied Orthopedic Surgical bed costs approximately $1,142 per day. Since rapid rehabilitation patients are discharged on average a day sooner than the standard rehabilitation this would be a cost savings of approximately $86,792 over seven month period.

Sustainment and Dissemination

Since the initiation of the retrospective chart review this project was shared with the multidisciplinary team of Orthopedic Surgeons/Physicians, Physical Therapist and nursing staff. Goal of this project was to promote rapid rehabilitation of total joint replacement patients and improve patient outcomes. Since January, early ambulation has become the routine practice for all total joint patients. The results were also presented during May 2016 Nurses Week evidenced based practice poster presentation and the San Antonio Military Health Systems and Universities Research Forum in May 2016.

Implications for Military Nursing and Future Research

This project has significant implications in supporting early mobilization for total knee and hip arthroplasty patient in a military healthcare organization. Current practice has resulted in a multidisciplinary collaboration with Orthopedic Surgeons and Physical Therapy.

These positive results not only show improved patient outcomes in regards to decreased length of stay, less risk of hospital acquired infections and significant cost savings to military healthcare facilities.

Further research is needed to explore other benefits of rapid rehabilitation in total joint patients such as reduced risk of pulmonary embolism, deep vein thrombosis and hospital acquired infection at San Antonio Military Medical Center.

Keywords Total joint, physical therapy, ambulation, length of stay

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