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CORR Insights

CORR Insights®: Are There Modifiable Risk Factors for Hospital Readmission After Total Hip Arthroplasty in a US Healthcare System?

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Where Are We Now?

THA is an effective, commonly performed procedure with a good cost-benefit ratio. However, up to 11% of patients are readmitted to the hospital soon after the procedure [2, 3, 9, 12]. As Paxton et al. summarized in the current study, patient risk factors for readmission after THA include age, male sex, black race, weight (obese and underweight status), poorly controlled diabetes, cardiac disease, patient comorbidities, longer hospital length of stay, discharge disposition, revision procedures, distance between hospital and home, and insurance coverage status [2, 9, 12]. Some of these factors, however, appear to be related to one another (such as health status and insurance coverage) and so they may not be truly independent variables.

The rate of unscheduled readmissions is commonly used as an indicator in evaluating the outcome of arthroplasties, despite criticism of its use as a basis for assessing quality of care [6, 10]. The reliability of readmission coding in databases has also been disputed [7]. However, the readmission rate has been used as a key performance indicator [1, 4], and so it remains an important area of inquiry.

Where Do We Need To Go?

Our goal is to consistently improve quality of care and reduce costs without compromising quality of care. By reducing the number of unscheduled readmissions we can do both. Unscheduled readmissions may be influenced both by modifiable and nonmodifiable risk factors. We can affect the rate of unscheduled readmission by altering modifiable risk factors. Future studies should focus on determining: (1) What is the best preoperative strategy/protocol (laboratory tests, questionnaires, risk classifications etc. …) to identify patients who are at highest risk for readmission; (2) what are the best ways to treat these risk factors (ie, managing and informing patients who are overweight on how to potentially lose weight prior surgery); and (3) what is the realistic goal of treatment (How much weight can you lose before surgery)?

This CORR Insights® *is a commentary on the article* "Are There Modifiable Risk Factors for Hospital Readmission After Total Hip Arthroplasty in a US Healthcare System?" *by Paxton and colleagues available at:* DOI: 10.1007/s11999-015-4278-x.

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How Do We Get There?

Modifiable risk factors such as BMI could be addressed before surgery through referral to weight management programs. However, there have been some concerns that weight loss before surgery could actually increase the risk of readmission [5]. On the other hand, patients with OA often have difficulties losing weight prior surgery. It is crucial for practitioners to identify patients who have elevated hemoglobin A1C (undiagnosed diabetes or poor control of diabetes) as it is a known risk factor for infection [11]. Another potentially modifiable risk factor is the issue of surgeon (and hospital) volume. There are several studies in the literature reporting benefits of high hospital and surgeon volumes [8]. In order to improve quality of care, we should support specialization of the surgeons and hospitals to perform total joint replacements. We would also need to determine the best way to identify patients who have higher risks for readmission. Preoperative questionnaires and risk calculators is likely the best way to identify patients who have higher risk for readmission. Patients with higher risk of readmission should be directed for further medical review.

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