

The Modified Frailty Index Predicts Morbidity and Mortality in Revision THA

SA Traven MD, RA Reeves MD, HS Slone MD, ZJ Walton MD



BACKGROUND

- The modified frailty index (mFI) is a risk-stratification tool that was originally comprised of 11-factors to predict complications such as morbidity and mortality across a variety of surgical specialties.
- However, the modified frailty index (MFI) has recently been revised from an 11-factor score to a 5-factor score.
- While the 11-factor score (mFI-11) has shown a positive correlation with postoperative complications, no study has yet evaluated the predictive ability of the 5-factor score (mFI-5).
- The goal of this study is to evaluate the mFI-5 as a risk-stratification tool in patients undergoing revision total hip arthroplasty.

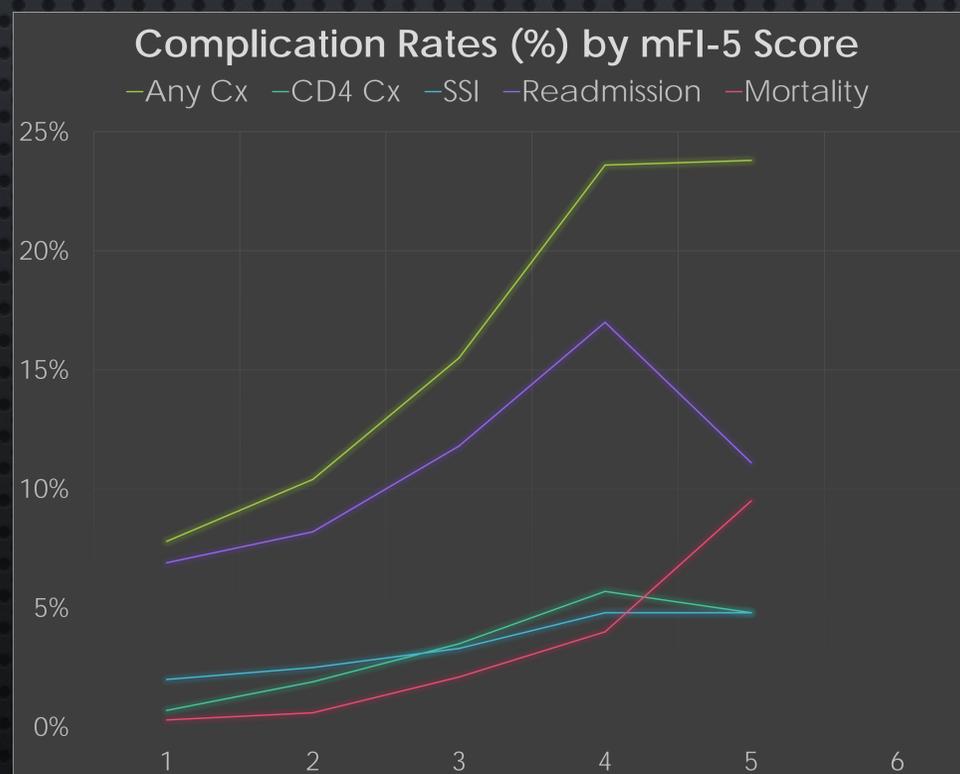
OBJECTIVES

The authors hypothesized that the mFI-5 would be able to predict morbidity and mortality in patients undergoing revision total hip arthroplasty (rTHA)

METHODS

- 8,118 patients undergoing rTHA between the years 2005-2016 were identified in the ACS-NSQIP database.
- The 5-factor score was calculated for each patient. One point is given for each of the following comorbidities:
 1. Hypertension
 2. Diabetes
 3. Congestive Heart Failure
 4. Chronic Obstructive Pulmonary Disease
 5. Non-independent functional status

RESULTS



RESULTS (Cont.)

For every point increase in mFI-5 score, the risk for the following complications increased by:

- **Any complication: 24.9%**
- **Life-threatening Medical Complications: 48.8%**
- **Surgical Site Infections: 15.1%**
- **Readmission: 19.0%**
- **Mortality: 77.6%**

DISCUSSION

- The mFI-5 predicts postoperative morbidity and mortality in patients undergoing revision total knee arthroplasty.
- The score is easily calculated from information obtained through the HPI.
- This tool can be used to risk-stratify patients undergoing rTHA.