Risk Factors of Loss to Follow-Up After Nonunion and Malunion Surgery

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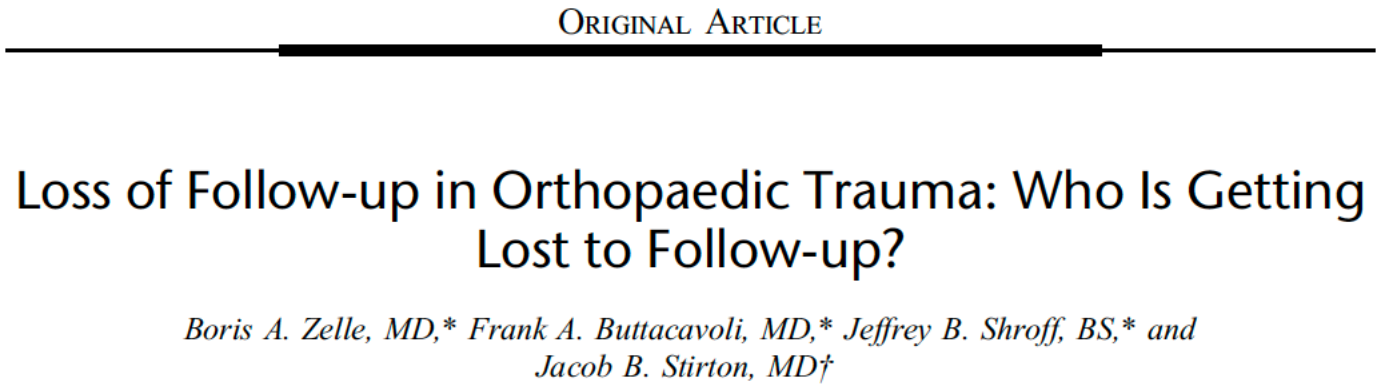
Disclosures

- Mani D. Kahn reports a relationship with American Academy of Orthopaedic Surgeons that includes: board membership. Mani D. Kahn reports a relationship with Limb Lengthening and Reconstruction Society that includes: board membership. Mani D. Kahn reports a relationship with Orthopaedic Trauma Association that includes: board membership. Mani D. Kahn reports a relationship with Johnson and Johnson that includes: consulting or advisory. Mani D. Kahn reports a relationship with General Electric Company that includes: consulting or advisory. Mani D. Kahn reports a relationship with Segan, Nemerov, Singer, Sonin, and Tancer that includes: paid expert testimony.
- We have no other disclosures.

Background

- Follow-up is critical in orthopedic trauma
- With nonunion and malunion correction, lengthy follow-up is typically required
- Studies have been done to analyze risk factors for loss to follow-up in orthopedic trauma
- None have been performed for nonunion and malunion – this study serves to fill that gap



ORIGINAL ARTICLE

Loss of Follow-up in Orthopaedic Trauma: Who Is Getting Lost to Follow-up?

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Materials and Methods

- Inclusion:
  - Patients treated operatively for nonunion/malunion at single urban medical center
  - Injury must have been iatrogenic or traumatic
  - >18 at time of definitive surgery
- Primary outcome is **nonadherence to clinical follow-up within 6 months of definitive surgery**
- Age, sex, race, ethnicity, housing, and Distressed Community Index (DCI) were recorded
- Also recorded was PMH (comorbidities), past psychiatric history, history of substance use disorder

Statistical Analysis

- Categorical demographics and PMH were analyzed with loss to follow-up using Chi-squared
- Quantitative variables (age and DCI) were analyzed with loss to follow-up using Mann-Whitney U Test
- Male sex and smoking status analyzed with multivariable logistic regression
- P-value of 0.05 was used for significance

Results

- 231 patients met inclusion criteria
- **Male sex** and **smoking** associated with loss to follow-up (p = 0.009 and 0.008, respectively)
- All other factors (**including insurance type, DCI, substance use, psychiatric history**) are **not associated** with loss to follow-up
- In multivariate analysis, male sex and smoking still significantly associated with loss to follow-up
  - Male sex OR 2.167
  - Current smoking OR 2.723

Discussion

- Male sex and smoking associated with loss to follow-up
- Signs of social deprivation (DCI, substance use, psychiatric history, insurance type) not associated with loss to follow-up
  - Different from loss to follow-up in different orthopedic trauma – unique finding in nonunion and malunion
- Methods to reach these high-risk patients could be implemented

Risk factors for loss to follow up of pelvis and acetabular fractures ☆

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