

Factors Associated with 30-Day Amputation in Patients with Critical Limb Ischemia Undergoing Endovascular Intervention

Insights from a National Electronic Health Record Database

Jeremy B Provance MS¹, John A Spertus MD MPH^{1,2}, Philip G Jones MS², Mark A Hoffman PhD^{1,3}, Matthew C Bunte MD, MS^{1,2}, Todd R Vogel, MD⁴, Carlos Mena-Hurtado MD⁵, Brian S Anderson, PhD⁶, Kim G Smolderen PhD⁵

1. University of Missouri-Kansas City School of Medicine, 2. Saint Luke's Mid-America Heart Institute (Kansas City, MO), 3. Children's Mercy Research Institute (Kansas City, MO), 4. University of Missouri School of Medicine, 5. Yale School of Medicine (New Haven, CT), 6. University of Missouri-Kansas City Bloch School of Management

BACKGROUND

- Patients with critical limb ischemia (CLI) may undergo endovascular peripheral vascular intervention (PVI) to restore blood flow and decrease the likelihood of amputation, however, amputation may occur following such interventions

AIMS

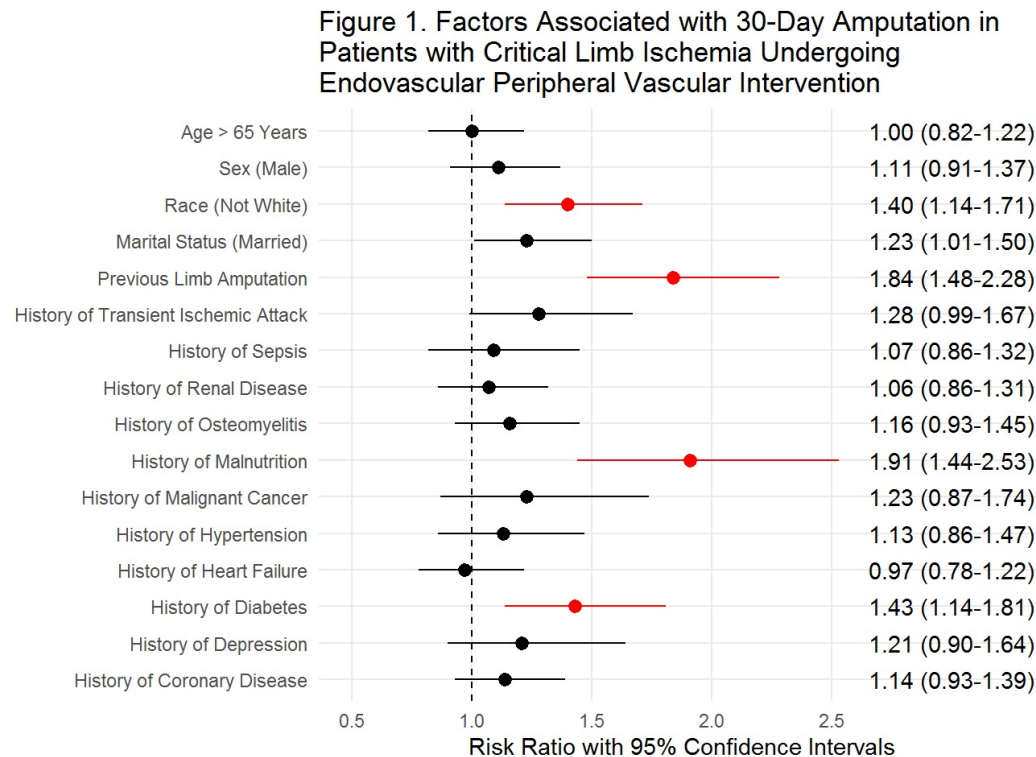
- This study sought to identify factors associated with early amputation in a real-world cohort of patients with CLI undergoing PVI

METHODS

- Using the national Cerner Health Facts electronic medical record database, CLI patients undergoing PVI were identified using administrative codes
- The primary outcome was unplanned amputation within 30 days of the index PVI
- Risk ratios predicting amputation were derived from a modified, binary outcome Poisson regression, with a random site effect, based on 16 patient demographic and clinical factors



Predictors of 30-day amputation in patients with critical limb ischemia included malnutrition, diabetes, previous amputations, and being of non-white race



RESULTS

- 16,247 unique patients from 185 sites with CLI undergoing PVI were identified
- Mean age was 69.0 years (\pm 12.6 standard deviation), 58.0% were male, and 70.4% were of white race
- Of these, 457 (2.81%) experienced a non-traumatic amputation within 30 days of the PVI procedure
- Amputation was associated (Figure 1) in the adjusted model with malnutrition, previous lower-limb amputation, diabetes and being of non-white race

CONCLUSIONS

- Among patients with CLI undergoing PVI, early amputation was relatively rare and was associated with markers of more severe disease
- Differences in pre-procedural nutritional status, clinical history and racial disparities warrant further investigation

DISCLOSURES

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