Introduction

- Brachial plexus injuries have devastating effects on upper extremity function.\(^1,2\)
- Earlier intervention has been associated with improved outcomes.\(^3\)
- Previous research has identified disparities in the treatment of upper limb injuries.\(^4\)

Objectives:

- To ascertain whether there are disparities in the receipt of brachial plexus repair in the emergent vs. elective setting.
- To investigate how brachial plexus repair in the emergency setting influences discharge disposition.

Methods

- Healthcare Cost and Utilization Project National Inpatient Sample Database (NIS), 2009-2014.\(^5\)
- Inclusion criteria: adults with a diagnosis of brachial plexus injury (ICD-9 code 9534).
- A multivariable binary logistic regression model was used to assess the impact of patient and hospital characteristics on the receipt of brachial plexus surgery and discharge disposition.

Results

- Emergent brachial plexus injury, n = 6618
- 153 (2.3%) had nerve repair surgery
- Factors affecting likelihood of supported discharge are described in Table 1
- Emergent vs. elective brachial plexus repair, n = 660
- Factors associated with elective repair:
  - White ethnicity
  - Male gender
  - Private insurance
- Factors associated with emergency repair:
  - African American ethnicity
  - Lowest income quartile

Conclusions

- Patients undergoing brachial plexus repair in the emergent setting are more likely to require supported discharge.
- Patients undergoing emergent brachial plexus repair are more socioeconomically disadvantaged compared to those undergoing elective repair.
- Further research evaluating injury severity and long-term outcomes may help to shed light on this topic.

References