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## "Characterization of Hand Surgery Transfers to a Level 1 Trauma Center in the Southeast: Assessing the Necessity for Emergent Care and Surgical Intervention"

Level 1 trauma centers receive hand surgery transfers from a broad geographical area, including hospitals many miles away. Previous studies indicate that a significant number of transfers that do not necessitate higher level of care. The purpose of our study is to characterize the hand transfers to our level 1 trauma center in the Southeast Region and identify the proportion of patients who require emergent evaluation and treatment by a hand surgeon.

The trauma database was queried for patients transferred for isolated hand and wrist injuries across a 5-year period. Exclusion criteria included polytrauma and medical comorbidities necessitating transfer. A retrospective chart review was performed to collect patient demographics, insurance carrier, level of transferring facility and referring provider, time of transfer, mechanism of injury, and management of injury. Descriptive statistics were performed on the data points.

A total of 241 patients were identified. 78.4% were transferred from non-trauma designated hospitals. Two patients from Level 1 trauma centers were transferred for evaluation for revascularization/replantation. The most common insurer was Medicaid (39.8%). 51.9% of transferred patients were admitted and underwent surgery during the hospitalization. 40.2% of patients suffered sharp/penetrating trauma. Complete digit amputation was for the most common reason for transfer. Average distance travelled for transfer was 64.4 miles.

Slightly more than half of isolated hand/wrist transfers to our level 1 trauma center in the Southeast Region required admission and surgical intervention. Education of emergency room providers should be undertaken to temporize hand injuries that do not require urgent evaluation and treatment by a hand surgeon and to prevent the unnecessary costs and time associated with inter-facility transfer. Other strategies, such as a telehealth consult prior to transfer, may also prove successful.