

Effect of Insurance Status on Likelihood of ORIF Treatment for Closed Clavicular Fracture in a Pediatric Population

Introduction: There is little consensus on the appropriate treatment for closed clavicular fractures in the pediatric population. Open reduction and internal fixation (ORIF) may be indicated for more severe fractures, but non-surgical treatment has been associated with similar outcomes in the past. It is possible that a patient's insurance status may affect the likelihood of receiving the more expensive ORIF treatment.

Methods: Data were obtained from the KID Inpatient Database. All patients who were hospitalized for a closed clavicular fracture between 1990 and 2012 were identified. Uninsured patients and patients with Medicaid were matched with patients with private insurance on the basis of age, sex, and race using propensity score matching (PSM). Logistic regression analysis identified associations between the two groups and the likelihood of ORIF treatment.

Results: 11,418 cases of closed clavicular fracture were identified. Following PSM, 3,559 uninsured or Medicaid patients were matched with 3,559 patients with private insurance. Being uninsured or having Medicaid was strongly predictive of not receiving ORIF compared to patients with private insurance (OR=0.762, p=0.002) after controlling for age, sex, and race.

Discussion: These results indicate that a pediatric patient's insurance status does affect the likelihood that they receive a potentially more beneficial ORIF treatment for closed clavicular fracture. The implications of this are many, including that a physician may be less likely to perform an operation for which they feel they will not be appropriately compensated, that a patient's parents may be less likely to agree to a more expensive treatment if they feel they cannot pay the associated cost, or that a physician may be more likely to suggest ORIF to a patient that they know will be paying with private insurance. These data indicate that special attention may be warranted to uninsured pediatric patients and those on Medicaid.