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Characterization of Sports Injuries requiring Hospitalization and Associated Procedures among Child and Adolescent Baseball Players: An Analysis of the Kid's Inpatient Database from 1997-2012.

INTRODUCTION: Baseball is a relatively safe noncontact sport. When injuries do occur, hospitalization may be required, and little is known on a macro-level scale of these injuries.

METHODS: The Kid's Inpatient Database (KID) was queried for baseball injuries using Ecodes (E0073) from 1997 to 2012. Hospitalization details, patient demographics, most prevalent diagnoses, procedures, and perioperative outcomes were investigated utilizing descriptive analytics.

RESULTS: There were 834 baseball injuries isolated. Players' mean age was 14.3 years. Males accounted for 72.2% of cases, with 69.5% listed as white. 27.9% were admitted on a weekend, 9.9% as elective admissions. Average length of stay was 2.1 days. 94.8% patients underwent routine discharge disposition, and mean total hospital charges were \$27895. Most prevalent primary diagnoses were unspecified closed ankle fractures (8.3%), closed fracture of fibula/tibial shafts (6.0%), closed bimalleolar fracture (4.7%), closed fracture of the orbital floor (blow-out) (3.1%), concussion (2.7%), closed malar/maxillary fracture (2.3%), and closed facial fractures (1.3%). Most prevalent primary procedures were open reduction-internal fixation (ORIF) of tibia/fibula (18.3%), followed by closed reduction without internal fixation of tibia/fibula (4.6%), closed reduction of fracture with internal fixation of tibia/fibula (3.4%), incision of mastoid/middle ear (1.7%), and open reduction of mandibular fracture (1.7%). 42 patients (5.0%) experienced a complication, the most common being anemia (19, 2.3%), bowel complications (14, 01.7%) and neurological deficits (7, 0.9%).

DISCUSSION: Baseball players are most likely to present with ankle fracture, bimalleolar fracture, tibial/fibular fractures, and facial fractures. Tibia/fibula ORIF was the predominant primary procedure. Closed reduction procedures of the tibia/fibula followed. Perioperative complication rate was 5%, consisting mostly of minor complications.