#199 Dan Monessa Advisor(s): William Urban

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

Introduction:
Little is known of the types of injuries, procedures, and hospital course of significant track and field injuries. Therefore, it was our goal to investigate hospitalizations, patient characteristics, and perioperative outcomes related to these injuries.
Methods:
The Kid's Inpatient Database was queried for track and field injuries from 1997-2012. Track and field hospitalizations were further divided to running injuries and injuries from non-running field events. Patient characteristics, hospitalization details, most prevalent diagnoses, procedures, and perioperative outcomes were investigated.
Results:
1849 track and field sports injuries were isolated (951 Runners, 898 Field Athletes). The most common primary diagnoses in runners were closed fracture of the femoral shaft (11.0%), closed supracondylar fracture of the humerus (8.0%), closed ankle fracture (3.0%), closed fracture of the tibia/fibular shafts (2.8%), closed fracture of the upper tibia (2.5%), and concussion with coma (2.5%). The most common primary procedures were open reduction/internal fixation (ORIF) of tibia/fibula (8.9%), close reduction internal fixation humerus (7.0%), and (ORIF) of femur (5.7%). 40 patients experienced a complication, the most common being anemia. The most common primary diagnoses in field athletes were unspecified lower leg fracture (4.9%), closed fracture of femoral shaft (4.8%), closed supracondylar fracture of the humerus (4.7%), closed fracture of fibular/tibial shafts (3.6%), and concussion with loss of consciousness (2.2%). The most common primary procedures were ORIF of the tibia/fibula, ORIF of radius/ulna, closed reduction internal fixation of humerus, and ORIF of femur. 45 patients experienced a complication, the most common being anemia.
Conclusion:
Runners were likely to present with closed femoral shaft, humerus, and ankle fractures while field athletes were likely to present with lower leg fractures, closed femoral shaft, and humerus fractures.