

The “weekend warrior”: Fact or fiction for major trauma?

Background: The “weekend warrior” engages in demanding recreational sporting activities on weekends despite minimal physical activity during the week. We sought to identify the incidence and injury patterns of major trauma from recreational sporting activities on weekends versus weekdays.

Methods: We performed a retrospective cohort study using the Alberta Trauma Registry comparing all adults who were severely injured (injury severity score [ISS] ≥ 12) while engaging in physical activity on weekends versus weekdays between 1995 and 2009.

Results: Among the 351 identified patients (median ISS 18; median hospital stay 6 d; mortality 6.6%), significantly more were injured on the weekend than during the week (54.8% v. 45.2%, $p = 0.016$). Common mechanisms were motocross (23.6%), hiking or mountain/rock climbing (15.4%), skateboarding or rollerblading (12.3%), hockey/ice-skating (10.3%) and aircraft- (9.9%) and water-related (7.7%) activities. This distribution was similar regardless of the day of the week. Most patients were injured as a result of a ground-level (21.9%) or higher fall while hiking, mountain climbing or rock climbing (25.9%); motocross-related incidents (24.2%); or collision with a tree, person, man-made object or moving vehicle (14.0%). Injury patterns were similar across both groups (all $p > 0.05$): head (55.8%), spine (35.1%), chest (35.0%), extremities (31.1%), face (17.4%), abdomen (13.1%). Surgical intervention was required in 41% of patients: 15.1% required open reduction and internal fixation, 8.3% spinal fixation, 7.4% craniotomy, 5.1% facial repair and 4.3% laparotomy.

Conclusion: The weekend warrior concept may be a validated entity for major trauma.