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Title of Research * Influence Symptoms of Depression and Anxiety on Prospective Injury Hazard in Collegiate Football
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Introduction & Purpose * Although the influence of psychological factors on the risk of athletic injury has been examined previously, most studies have been limited by cross-sectional study design or without accounting for the time to injury event. The survival functions between football players with and without depression symptoms will be compared, and the effect of baseline depression on hazard of injury in prospective seasons among football players will be estimated.
Experimental Design *
Non-injured football players at two Division I universities were enrolled between January 1, 2008 and February 28, 2010. Data on demographics, history of injury, symptoms of depression and anxiety were collected at baseline. Enrolled players were followed either up to the first injury event, or to the end of the study (July 31, 2010) if experiencing no injury. Log-rank tests were used to compare the survival functions between players with and without depression symptoms. The Cox–proportional hazards model was employed to assess the effect of baseline depression and anxiety on hazard of injury, adjusting for other covariates.
Results *
Of 263 enrolled football players, 85 players (32.3%) experienced at least one injury during the study period. Fifty-nine players (22.4%) reported depression symptoms and 88 athletes (33.5%) reported anxiety at baseline. Players with depression symptoms at baseline tended to have worse survival function compared to those without depression symptoms, although the difference was not statistically significant. Players with baseline depression symptoms had increased hazards of injury compared to those without depression symptoms, with adjusted hazard ratio of 1.5(p=.0098), while baseline anxiety was not associated with hazard of injury.
Conclusions *
Our findings showed that baseline symptoms of depression, but not anxiety, were associated with increased hazard of injury in prospective seasons. Injury prevention efforts need to incorporate screening and treating baseline depression in order to reduce prospective hazards of athletic injuries.