Concussion Assessment and Return to Play Protocols in New England College and High School Football Programs

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Context: With the recent increase in attention towards concussion awareness, the need for a standardized approach to concussion prevention and management could prove useful. Objective: The purpose of this study was to investigate concussion assessment protocols and return to play procedures in Division I (DI), Division III (DIII) and high school (HS) football programs in the New England region. Design: This is a cross-sectional design to identify the common practices of football programs in terms of concussion assessment and return to play protocols. Setting: A survey was provided electronically to football programs in the New England. Participants: 83 Certified Athletic Trainers in the New England region received an electronic SurveyMonkeyTM survey. Thirty-four programs responded; 33.3 % DI programs, 45.2% DIII programs, and 40% HS programs. Interventions: The SurveyMonkeyTM consisted of questions about concussion assessment and return to play protocols. No additional tools were used to assess the responses. Main Outcome Measures: The questions on the survey remained the same throughout the study. Results: The average number of reported concussions for the 2011 football season in DI programs was 14.0; DIII was 8.4, and in HS was 6.8. Overall, the most utilized pre-season baseline testing tool was ImPACT® (Immediate Post-Concussion Assessment and Cognitive Testing), if any was used at all; 22% DI; 50% DIII, and 82% HS. Other baseline assessments used include the Balance Error Scoring System (B.E.S.S) and the Sport Assessment Concussion Tool (SCAT). In regard to on-field and/or sideline testing, DI programs (50%) used a Standardized Assessment for Concussion (SAC), whereas DIII and HS assessed concussions with the SCAT. Many programs re-administered the assessment tools 24-48 hours post concussion, but more importantly, 20% of DI, 36% of DIII, and 9% of HS programs do not re-administer prior to return to play. Official clearance for return to play in DI programs is warranted by the team physician; by the team physician or certified athletic trainer in the DIII programs; and by the certified athletic trainer or family primary care physician in HS programs. At the time of this study, only three states (Connecticut, Vermont, and Massachusetts) have specific published guidelines for return to play authorization. Maine and New Hampshire guidelines are pending approval. Conclusion: Overall, there is minimal standardization in regard to baseline testing, sideline assessment, and return to play protocol or authorization for clearance. There is a lack of a gold standard for practice and the observed gaps in the management of concussion may put the athlete at an increased health risk.

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