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**Background** Recurrent ankle sprains (RAS) are often preventable through sensorimotor training interventions. However, implementation of RAS prevention programs for athletes is often limited because of a lack of resources, time, and understanding of long-term negative consequences associated with RAS. Prospective, longitudinal documentation of self-reported and physical functions in athletes with RAS over the duration of an athletic season without participation in RAS prevention training is needed to highlight an importance of implementation of specific injury managements for athletes.

**Objective** Determine whether changes in factor contributing to RAS occur in high school female basketball athletes with bilateral RAS following six months.

**Design** Prospective cohort study.

**Setting** High school basketball facilities.

**Participants** Eighteen high school female basketball athletes with bilateral RAS (age= $15.81 \pm 0.40$  yrs, BMI= $21.56 \pm 1.70$  kg/m<sup>2</sup>) participated. Participants were defined as having RAS if they have sustained a minimum of two acute lateral ankle sprains on the same lower extremity.

**Assessment of Risk Factors** Participants completed patient-generated, clinician-generated, and laboratory-based outcome assessments in two testing sessions separated by six months. No specific injury prevention program for RAS was provided during the duration of an athletic season.

**Main Outcome Measurements** The Cumberland Ankle Instability Tool (CAIT) was used to assess self-reported ankle instability. Foot cutaneous sensation thresholds was assessed using Semmes-Weinstein monofilaments. Rate of force development (RFD) during a single-leg drop landing was quantified with a force platform. Paired t-tests were utilized to examine between-session differences in each dependent variable.

**Results** There were no differences in CAIT (Right:p=0.831 Left:p=0.688), foot cutaneous sensation thresholds (Right:p=0.177, Left:p=0.199), and RFD (Right:p=0.064, Left:p=0.079) between two testing sessions.

**Conclusions** No changes in the selected outcome measures occurred in high school female basketball athletes with bilateral RAS following six months, indicating that specific prevention strategies for RAS may be necessary to restore and improve self-reported and physical functions.