Conclusions Almost 20% of first-year pre-professional dancers reported an ankle injury, with more than 80% of these injuries leading to dance time-loss. No significant risk factors could be identified for ankle injuries throughout the academic year. Since ankle injuries are common injuries among dancers, research in larger dance populations with longer term of follow-up, including relevant risk factors, is necessary to evaluate the impact of these injuries further.

111 EPIDEMIOLOGY OF ANKLE SPRAINS IN ELITE HIGH SCHOOL BASKETBALL PLAYERS: MEDICAL AND PHYSICAL CHECKUP REPORT, RELATIONSHIPS BETWEEN PREVALENCE OF ANKLE SPRAINS, UNSTABLE SENSATION, ATFL PATHOLOGY AND THE BALANCE TEST

Background Ankle sprains are the most common injury among basketball players. However, a number of athlete report persisting symptoms which can lead to the chronic ankle instability (CAI), even worse, their articular cartilage damage.

Objective To investigate the prevalence of ankle sprains and the relationships between recurrence, perceived instability, ATFL pathology, range of motion and the balance test among elite high school basketball players.

Design Cross-sectional study.

Setting High school national championship tournament in 2017.

Patients (or Participants) All players who voluntarily participated in our checkup.

Interventions (or Assessment of Risk Factors) Questionnaire, ultrasonographic examination for anterior talofibular ligament (ATFL) pathology, ankle dorsi-flexion (DF) angle measurement and star excursion balance test (SEBT).

Results We received the responses from 1013 players (330 male and 683 female players). It revealed that 74.3% of males and 82.7% of females had injured their ankle at least once and recurrence rate was 59.6% and 63.0% respectively. 79.3% of players were injured before 16 years of age. Fifty-two male and 77 female players completed all examinations. It was revealed that the players who had recurrent sprains suffered more severe ATFL injuries and felt unstable sensation in their ankle compared with the players without sprain. Players who got ATFL tear had smaller DF angle significantly correlated with the relationships between recurrence, perceived instability, ATFL pathology, range of motion and the balance test.

Conclusions Prevention of the CAI should be focused on the following 3 points: 1) Education for younger, pre-injury age, 2) Treatment just after their first injury with an emphasis on the ATFL healing and range of motion restoration, 3) Appropriate exercises and/or equipment for prevention from recurrence.