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Risk of injury on artificial turf and natural grass in young female football players.

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BACKGROUND: Artificial turf is becoming increasingly popular, although the risk of injury on newer generations of turf is unknown. **AIM:** To investigate the risk of injury on artificial turf compared with natural grass among young female football players. **STUDY DESIGN:** Prospective cohort study. **METHODS:** 2020 players from 109 teams (mean (SD) 15.4 (0.8) years) participated in the study during the 2005 football season. Time-loss injuries and exposure data on different types of turf were recorded over an eight-month period. **RESULTS:** 421 (21%) players sustained 526 injuries, leading to an injury incidence of 3.7/1000 playing hours (95% CI 3.4 to 4.0). The incidence of acute injuries on artificial turf and grass did not differ significantly with respect to match injuries (rate ratio (RR) 1.0, 95% CI 0.8 to 1.3; $p = 0.72$) or training injuries (RR 1.0, 95% CI 0.6 to 1.5, $p = 0.93$). In matches, the incidence of serious injuries was significantly higher on artificial turf (RR 2.0, 95% CI 1.3 to 3.2; $p = 0.03$). Ankle sprain was the most common type of injury (34% of all acute injuries), and there was a trend towards more ankle sprains on artificial turf than on grass (RR 1.5, 95% CI 1.0 to 2.2; $p = 0.06$). **CONCLUSION:** In the present study among young female football players, the overall risk of acute injuries was similar between artificial turf and natural grass.

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