## Injuries in male professional football players: a prospective study during three consecutive seasons in the Swedish premier league

Adolfo López Personat<sup>1</sup>, Håkan Bengtsson Bengtsson<sup>2</sup>, Daniel Castellanos<sup>3</sup>, Martin Hägglund<sup>2</sup>, Markus Waldén<sup>2</sup> Football Research Group, Linköping, Sweden, <sup>1</sup> Department of Orthopedics, Örebro University Hospital, Örebro, Sweden, <sup>2</sup> Department of Health, Medicine and Caring Sciences, Linköping University, Linköping, Sweden, <sup>3</sup> Faculty of Medicine and Health, Örebro University, Örebro, Sweden; Capio Specialistvård, Östergötlands län, Motala, Sweden

Objectives: To (1) investigate injuries in the Swedish male premier league during three consecutive seasons, describe injury incidence; (2) establish most common patterns: types and locations, severity and mechanisms, and (3) compare differences between training sessions and matches.

Methods: During the 2018, 2019 and 2020 seasons 537 players from ten, nine and twelve teams respectively were included. Members of the medical staff of included teams recorded injuries and exposure in the Swedish National Injury Registry.

Results: 1260 injuries (54% training and 46% match). Injury incidence per 1000 hours in matches was 25.1 (95% CI=23.2 to 27.3) and in training 4.7 (95% CI=4.3 to 5.0). Injury rate in matches was 5-fold higher (25.1 vs 4.6 injuries per 1000, p<0.05). 87% of the injuries were located to the lower limbs, most frequent location was the thigh (27%). Muscle injuries were the most frequent injury type (47%). Total mean absence for both match and training injuries was 9 days. Mean absence after injury ranged between 8 to 9 days, match injuries during the 2020 season were the exception with 12 days (IQR 5-27).

Conclusions: Injury frequency, patterns and severity seem to remain constant despite the efforts in injury prevention in the last decades. Results are similar to previous studies published in Swedish and European elite football. There were no differences in the severity between match and training. The 2020 season, during the COVID-19 pandemic, showed the lowest injury rate for matches with highest severity.

1