

Short Communication

The Prevalence of Injuries in Professional Soccer Players

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Because soccer is a highly demanding activity, the injury incidence is very high [1]. In addition, the risk of acute injury in professional soccer players is up to 1,000 times higher when compared to any type of industrial activity [2]. Epidemiological studies indicate that the prevalence rate of injuries in professional soccer is 15%, which means that for a team of 25 players, approximately 4 players are not available to participate in each training session and official match showed that 65-95% of players had at least one injury each season [2]. Most scientific studies show that injury risk increases with the time of exposure to official competition [3,5]. The values of injury incidence indicate that 13-40.3 injuries per 1,000 match hours happen during official matches, while 1.9-5.9 injuries per 1,000 hours occurred during training sessions [4-6]. It is important to know that between 16% and 35% of the total injuries are recurrences [7], which are classified in turn into early recurrences (< 2 months, 12-33%), and delayed recurrences (> 2 months, 2-4%) [7]. In addition, the incidence of injury recurrences is influenced by the level of the soccer players. Those players who compete at a higher competitive level are less likely to be injured. This fact can be explained by the human and material resources in the elite soccer teams [7]. The purpose of this short communication is to describe the location, typology and severity of the main injuries produced in soccer players during training and match-play.

Obviously, as a result of the nature of soccer, the most common location of the injuries is in the lower limbs (77-93%) [3,4]. The thigh is the most affected area, but the groin and hip are also areas where a large number of injuries in football players occur. In addition, in relation to the joints, knees and ankles have the highest number of injuries [4,8]. Regarding the typology of the injuries, the most common are muscle injuries, which constitute 35-50%, and they are mainly located in the quadriceps, hamstrings, adductors and lower leg [5,6]. The second injuries with more frequent occurrences are joint injuries (11-24%), which affect the ankle

(external lateral ligament) and the knee (internal lateral ligament) [6,7]. Finally, less frequent injuries are caused by bruises (8-21 %) and fractures (1-5%) [6].

In a scientific study performed with teams that played Spanish League [6], a classification was done regarding injuries according to their severity, beginning with slight severity injuries (< 3 days; 35.7%), the most common, followed by moderate (8-28 days; 29.2%), minor (4-7 days; 26.8%), and major (> 28 days; 8.3%). However, in the investigation of [7] carried out with European "Top class" professional players, this type of injury was approximately 15.6 % of total injuries. Finally, with regard to the origin of injury, most injuries are caused by overuse rather than by trauma. However, if we differentiate between the injuries occurring during matches and training sessions, we can observe that overuse injuries are more common in training and that traumatic injuries have a greater incidence in matches. This could be due to the intensity of competition during match-play [9].

In the present study we have shown the main characteristics of injuries in professional soccer players considering location, typology and severity. Also, it has been confirmed that the injury incidence during match-play is higher than in training sessions. However, it is necessary to deepen this information to know the impact of these injuries on competitive matches and training sessions missed and the economic cost for soccer clubs. This information could help physical trainers and medical staff to develop prevention strategies in order to reduce the injury incidence in professional soccer players. As a future line of research it is proposed to investigate the epidemiological differences between the playing positions on the field. This injury incidence data can be very useful to coach staff when organizing the training loads of the microcycle.

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