

EPIDEMIOLOGY OF THE MUSCULAR INJURIES IN SPANISH FOOTBALL

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Introduction

The number of existent competitions in European soccer, among national and international competitions has risen in the last few years to levels, possibly maximum (71 games: 40 National League, 9 pre-season matches, 6 National selection, 16 Champion League).

When we talk about the teams that compete in the two national competitions, the European and the games in the national selection, probably we are at one level that implicates a necessary decrease in the performance and /or an increase in the possibility of musculoskeletal injuries.

In this paper we schematically present the incidence of muscular injury we observe during the last three competitive seasons of Valencia Football Club.

Methods

We classify the muscular injuries with a modification of the Lefebvre proposal in which we can see the relationship between the clinical diagnosis and the ultrasound scan. Muscular injuries are then classified as: muscular overload (DOMS), contractures, contusions without rupture, partial tears and total muscle ruptures.

Results

The muscular injuries in relation to the total injuries were: 44% during the 2000-01 season, 33% during the 2001-02 season and 37% during the 2002-03 season.

The average number of muscular injuries during each season was 69 injuries (i.e. 38% of the total number of injuries).

The average number of rehabilitation sessions dedicated to the treatment of the muscular injuries was 666 for each season (i.e. 24% of the total number of rehabilitation sessions).

Considering the classification of the muscular injuries, we found 36% of cases of muscular overload 20% of contractures, 26% of contusions, 11% of partial tears and 7 % of total muscle ruptures. It is interesting to note that the number of rehabilitation sessions for each type of muscular injury, was 4.3 for overloaded muscles, 8.5 for the contractures, 4.1 for the contusions 16.6 for the partial tears and 56 sessions for the total ruptures.

Discussion

About the revision of muscular relapses, we don't appreciate any relevance. This is dependent on the careful protocol of rehabilitation utilized and on the observance of the correct times for the healing process before the return to the competitive activity. However, we appreciate some cases of injuries that affect another muscular group of the same athlete.

An analysis of the factors that imply an increase of relapses in the muscular injury become indispensable and we could conclude what they are a consequence of the great quantity of existent competition. However this statement should be clarified, since, the competition factor, if alone, is not the only one responsible in absolute terms. We should name the following ones: recovery time between competitions, volume and intensity of training between competitions, sharp or accumulated fatigue, recovery measures applied between competitions, psychological, medical and other traumatic factors.

On the other hand, it would be frank not to name the external media factors, which will impact the necessity of shortening the recovery times that somehow generate a strong possibility of relapses, because of the uncompleted necessary times of recovery.
