33 - INJURIES IN FEMALE FOOTBALL REFEREES OF THE CATARINENSE FOOTBALL FEDERATION

ALBERTO INÁCIO DA SILVA[1]
MAURO RICETTI PAES[2]
MARIO CESAR DE OLIVEIRA[3]
[1]Universidade Estadual de Ponta Grossa (UEPG) – Brasil
[2]Programa de Pós-Graduação – Mestrado em Fisiologia Humana (UFPR) – Brasil
[3]Programa de Pós-Graduação - Universidade Federal de São Paulo (USP) Escola Paulista de Medicina – Brasil
albertoinacio@bol.com.br

INTRODUCTION

Football is a team sport played for 90 min (two times 45 min) in a rectangular field with approximately 8250m², two teams with 11 players, who must follow the rules imposed by the Fédération Internationale de Football Association (FIFA). However these rules are not equipped with self-application, depending on a refereeing team that to enforce the established normative principles, without which the rules were written so only worthless. Today a team of refereeing consists of a referee and two assistants, and also climbed a fourth official who will serve out the four lines (FIFA, 2010).

According to data collected by FIFA there are approximately 270 million people directly involved with football. Of these, 265 million would be players, and about 840,000 were registered referees and assistants (94% men and 6% women), the rest would consist of officials, leaders of clubs, associations, etc.. Compared to the first survey in 2000 identified a 17% increase in the total number of referees (BIZZINI et al. 2008). In Brazil there are over 25 (twenty five) entities representing the football referee, and depending on the state to find two bodies.

The football referee can be considered the 23th player (EISSMANN and D'Hooghe, 1996). By its very important for football, the scientific community began to study the referee in recent years. However, scientific studies on soccer referees are recent and scarce, especially compared to the huge amount of studies in soccer players (Da Silva and Fernandez, 2003; Da Silva, 2005).

The anthropometric profiles of the referee and the assistant referees, their movement patterns, their physiological demands during the match and physical tests to which they are often submitted have been examined in numerous studies (Reilly and GREGSON, 2006). However, there is little research on the prevention of injuries in soccer, due to lack of solid evidence about the risk factors and injury mechanisms at different levels of play (Andersen et al. 2004).

After a review of the literature regarding the injury in soccer referees, were found four studies reporting the incidence of injury to the referee. All studies were published recently. Two of these were developed with Swiss referees (BIZZINI et al. 2009a, 2009b) with an international FIFA referees (BIZZINI et al. 2008), and Brazilian referees (Paes et al. 2011).

The majority of studies carried out with referees in Brazil took place in the state of Paraná, thus, little or nothing is known about the situations that referees from other states are exposed. Therefore, the aim of this study was to analyze the frequency, circumstances and characteristics of injuries suffered by football referees in the Santa Catarina state of belonging to Catarinense Football Federation (FCF).

METHODS

This study was characterized as a retrospective study that aimed to identify in which situation, location and type of injury that football referee is injured. The procedures used in this study are in accordance with resolution 196/96 of the National Health Committee and the Helsinki Declaration of 1975, as approved by the Ethics Committee of the UEPG (resolution 49/2007).

The study population consisted of referees accredited by Catarinense Football Federation (FCF). The sample consisted of 12 referees Data were collected during pre-season referees FCF organized by the Association of Football Referees of Santa Catarina (SINAFESC) at the beginning of 2011, in Florianópolis (Santa Catarina - Brazil) . As exclusion criteria we used the non-participation of referees for this event. To collect the data we used a semi-structured questionnaire administered by an experienced researcher in an interview.

The questionnaire used was proposed by Paes et al. (2011) is thus standardized questions as to precisely characterize the activities related to refereeing, in order to account for only sports injuries. Therefore, only those were considered sports injuries occurred in three situations previously defined: those that occurred during a soccer game during physical training or during the physical tests applied by the FCF or the Brazilian Football Confederation (CBF) for the evaluation of physical referees. Were discarded injuries that occurred outside of these three situations. In addition, the referee was asked how often this train during the week, had a professional monitoring, the average duration of these sessions, when she joined the staff of refereeing of the federation and he practiced before becoming a football referee in one of three ways: professional, amateur or leisure.

RESULTS AND DISCUSSION

The study followed the methodology of a previous study by Paes et al. (2011) and most of the procedures used here similar to those used by Bizzini et al. (2008, 2009a, 2009b), when they also investigated the occurrence of injury in soccer referees. The problems associated with retrospective studies are memory lapses, which have been previously described (Jung and DVORAK, 2000; TWELLAAR et al. 1996). This is because only injuries with moderate or greater severity may have been reported and the true incidence of injuries may have been underestimated.

After analyzing the data, one can see that 16% of referees assessed reported some type of injury in the course of his career. All said they had sought medical help for diagnosis. Despite the authors' experience in the type of research presented here, the search for medical care by the referees helped to identify more precisely the type of injury that the referee had suffered. The greatest number of injuries occurred during the referees in training sessions, all of which have been plagued by knee sprain. The first information corroborates the findings of Paes et al. (2011) and Bizzini et al. (2008, 2009a), because these authors also found that the referees are injured more often during physical training. However, in the Swiss study involving referees, it was found that these more are injured during matches than during training (BIZZINI et al. 2009b).

All injuries that referees were involved occurred in the lower limb. The predominance of occurrence of injury in the

lower limb football referees also been found in other studies (Paes et al. 2011; BIZZINI et al. 2008, 2009a, 2009b). A study of the topography of injuries involving football players performed during 64 games of World Cup 2002 identified that the injuries sustained during this competition affecting predominantly the knee joints, ankle and thigh muscles and calf, or lower limbs (Jung et al. 2004a). In another study during football competitions organized by FIFA and Olympic Games between 1998 and 2001, it was found that the injuries occurred mainly in the ankle (17%), thigh (16%), leg (15%) and knee (12%), i.e. also in the lower limbs (Jung et al. 2004b). In a study published recently in Brazil, was also shown that injuries in soccer players predominantly affecting the lower limb, the most frequent occurrence of strains (Valente et al. 2011). These data demonstrate that referees and players are likely to develop injuries predominantly in the lower limbs. Therefore, the prophylactic measures adopted to reduce the risk of injury in soccer players may be adopted by the referees of this modality.

The referees say hold on average 60 minutes of physical activity three times a week as a fitness to refereeing. Physical activity practiced by the vast majority of the referees is running aerobics, being ignored by them anaerobic work, ie, intermittent races. So, what is observed here is that the vast majority of referees training frequency, duration and type of physical activity recommended for a person possessing the minimum quality of life and not for the increase in physical abilities, although 50% of referees have played football in a professional or amateur. It also has been observed and discussed in another country. Krustrup and Bangsbo (2001) developed a study of Danish referees and reported that the training of top-class referees often consisted of moderate-intensity aerobic running routes with between 3 to 7 km.

With the pooling of information on the average time spent on physical training, it was established that the incidence of injury 1000h training was 1.04 ± 0.50 hours. Put here what was the incidence of injury in the training of your article and other articles. In the study of the Brazilian Football Confederation (CBF) referees, the incidence of injury during training was 32.58 ± 22.12 injuries per 1000 hours (Da Silva and Paes, 2011). In another paper involving 200 football referees injury incidence during training was 2.16 injuries per 1000 training hours (Paes et al. 2011). Bizzini et al. (2009a) reported incidences of 0.06 for Swiss high-level referees, 0.09 for a complete sample of Swiss referee (BIZZINI et al. 2009b) and 0.1 for referees selected for the World Cup 2006 (BIZZINI et al. 2008).

The referee have a higher number of injuries in training than in the game is an unusual situation, because the distance traveled by the referees is similar to a football player. It has been reported in scientific literature that the football referee is traveling between 9 and 12 km in the course of the game (Reilly and GREGSON, 2006) is that the displacement of the soccer player during the match, in particular the midfielder, is also between 9 and 12 km during a match (RAYMUNDO et al. 2005). This similarity between the total displacement of the referees and players reinforces the idea that football referees must prepare physically more professional and specific (Da Silva, 2005, WESTON et al. 2004), because football requires that the current athlete has a high level of anaerobic capacity (speed and explosive power) for the actions of the game, especially sprint (sprint) and aerobic resistance for short periods of recovery between playing actions (RAYMUNDO et al. 2005).

According to Ekstrand and Nigg (1989), the football player may suffer injury during the game due to the use of inappropriate shoes, as well as the type of lawn or unevenness of the soil used, and of course that caused by physical contact. These factors were also mentioned by some during the selection of referees for 2006 World Cup, as possible causes of their injuries (BIZZINI et al. 2008). The fact that the referees during the game are not likely to receive any physical contact as players suggest that injury profile is different from football players, so with less risk of acute injuries (BIZZINI et al. 2009). This is because almost half of all acute injuries (especially knee and ankle sprains) in football players are caused by physical contact with another player (Hawkins and Fuller, 1999, Jung et al. 2004a).

Studies show that football referees have to act in terms of games of national and international level need to have some years of experience (Jones et al. 2002) however, referees studied here had an average age of 26 and 1.5 years of experience. According to literature the fact that the referees were on average 10 to 15 years older than the players would have a negative effect on physical performance of the same (WESTON et al. 2004). Because of this, the referees should undergo specialized training programs to ensure an appropriate level of physical fitness, to conduct a competitive game of football and being subjected to physical tests, because with increasing age there was a higher pre-available for muscle injuries Paes et al. (2011). In the Swiss study involving referees was also observed that referees with greater age had a higher number of injuries (BIZZINI et al. 2009b). Arnason et al. (2004) reported that increasing age increases the risk factor for injury in football players. The age difference between players and referees item can be justified by experience, since this is considered among the governing bodies FIFA and UEFA international refereeing as a prerequisite for the individual to enter the elite of the refereeing (EISSMANN and D'Hooghe , 1996).

CONCLUSIONS

The referees had injured knee sprain. As these referees without having had this injury suffered a stroke, this injury may have been caused due to a weakened muscle. And other data support this argument, is the fact that on average they only train three times a week and on average by 60 me. As shown by data from literature review, the physical effort of a referee is similar to a player, so your training should be very close to these athletes. There are very few female who are interested in refereeing soccer. Thus, as shown by this study, it still have little experience, they are just a short time judging, therefore, it becomes a limiter to see female working in big games, as the experience is a determining factor for football refereeing.

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INJURIES IN FEMALE FOOTBALL REFEREES OF THE CATARINENSE FOOTBALL FEDERATION

ABSTRACT

Sports injuries have highlighted studies which include football. For a long time it is known that football referee would be susceptible to the same injuries than the football players. Thus, the aim of this study was to analyze injuries situations in professional football referees. The sample was composed of 12 female referees from Catarinense Football Federation (FCF), with 25,5 ± 4,2 years old, 58 ± 2,8 kg and 1,63 ± 0,05m of age, weight and height means, respectively, that were interviewed during 2011 pre-season. We established three situations that a referee could be injured and if this injury would be considered a sports injury: during physical evaluation, in a training session or in a match. Of the entire sample surveyed, two referees claim to have suffered some type of sports injury in one of the situations described above. Two injuries were identified. All occurred during the training of refereeing. For these data, we can conclude that football referees do not get injured during the game or physical test, the most frequent occurrence of injury during training.

KEY WORD: referee, football, sports injuries.

BLESSURES EN ARBITRES FÉMININ DE FOOTBALL DE LA FÉDÉRATION CATARINENSE DE FOOTBALL

RÉSUMÉ

Les blessures sportives ont gagné en importance dans les études impliquant le football. Il a longtemps été dit que l'arbitre feminin de football seraient sensibles aux mêmes types des blessures que les joueurs. Par conséquent, l'objectif de cette étude a été d'analyser les situations dans lesquelles l'arbitre féminin de football professionnel se blesse. À cette fin, l'échantillon a été composé de 12 arbitres accrédités à la Fédération Catarinense de Football (FCF), âge moyen 25,5 ± 4,2 ans, poids 58 ± 2,8 kg et la hauteur 1,63 ± 0,05 m interviewé au cours de la pré-saison 2011. A été établit trois situations dans lesquelles l'arbitre pourrait être blessé, on étant cette blessure considérée comme sportive: lors de l'évaluation physique pendant la seance d'entraînement physique, et au cours du match. De la totalité de l'échantillon, deux arbitres prétendent avoir subi un certain type de blessure sportive dans l'une des situations décrites ci-dessus. En étant identifié deux lésions. Toutes sont survenues pendant l'entraînement des arbitres. Pour ces données, nous pouvons conclure que les arbitres de football ne se blessent pas pendant le match ou pendant le test physique, mais plus fréquemment pendant l'entraînement.

MOTS-CLÉS: arbitre féminin, football, blessures sportives.

LESIONES EN ÁRBITRAS FÚTBOL DE LA FEDERACIÓN CATARINENSE DE FÚTBOL

RESUMEN

Las lesiones deportivas se han destacado en los estudios con el fútbol. Desde hace tiempo se dijo que la árbitra de fútbol sería susceptible a los mismos tipos de lesiones que los jugadores. Por lo tanto, el objetivo de este estudio fue analizar las situaciones en que se lesiona la árbitra de fútbol profesional. Con este fin, la muestra estuvo conformada por 12 árbitras acreditadas Federación Catarinense de Fútbol (FCF), edad media 25,5 ± 4,2 años, peso 58 ± 2,8 kg y altura de 1,63 ± 0,05 m, entrevistadas durante la temporada de 2011. Se establecieron tres situaciones en que la lesión se consideraría lesión deportiva: durante los tests físicos, entrenamiento físico y en el transcurso del partido. De la muestra total de encuestadas, dos árbitras dicen haber sufrido algún tipo de lesión en una de las situaciones descritas anteriormente. Dos lesiones fueron identificadas. Todos ocurrieron durante el entrenamiento físico de las árbitras. Para estos datos, podemos concluir que las árbitras de fútbol no se lesionó durante el juego o prueba física, la ocurrencia más frecuente de lesión es durante el entrenamiento físico.

PALABRAS-CLAVE: árbitra, fútbol, lesiones deportivas.

LESÕES EM ÁRBITRAS DE FUTEBOL DA FEDERAÇÃO CATARINENSE DE FUTEBOL

RESUMO

Lesões desportivas têm ganhado destaque nos estudos envolvendo o futebol. Há muito se comenta que a árbitra de futebol estaria suscetível aos mesmos tipos de lesões que os jogadores. Assim sendo, o objetivo do trabalho foi analisar as situações em que a árbitra profissional de futebol sofre lesões. Para tanto, a amostra foi composta por 12 árbitras credenciadas pela Federação Catarinense de Futebol (FCF), com idade média de 25,5 ± 4,2 anos, peso 58 ± 2,8 kg e altura 1,63 ± 0,05 m, entrevistados durante a pré-temporada de 2011. Estabeleceram-se três situações em que a árbitra poderia se lesionar, sendo esta lesão considerada lesão esportiva: durante a avaliação física, no treinamento e no transcorrer da partida. Do total da amostra pesquisada, 2 árbitras declaram ter sofrido algum tipo de lesão esportiva em uma das situações descritas anteriormente. Foram identificadas 2 lesões. Todas ocorreram durante o treinamento da árbitra. Por estes dados, pode-se concluir que as árbitras de futebol não se lesionam durante o jogo ou teste físico, sendo mais frequênte a ocorrência de lesões físicas durante o treino.

PALAVRAS-CHAVE: árbitra, futebol, lesões esportivas.