9 VIDEO ANALYSIS OF CAUSES AND MECHANISM OF THE ACL INJURIES IN THE IRANIAN PROFESSIONAL SOCCER PLAYER

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Soccer is one of the most popular and high-risk sports around the world. The highest number of injuries in this sport occurs in the knee joint and anterior cruciate ligament (ACL). The aim of this study was to examine the causes and mechanism of

ACL injuries among the Iranian professional soccer players. Fifteen professional soccer players (age: 25 ± 3.48 years, height: 179.13 ± 4.61 cm, weight: 72.6 ± 4.43 kg) who suffered from ACL injury were studied. Information was collected via watching the video of the matches and interviewing with the team physicians and studying the medical files and reports. The result of this study showed that the number of non-contact injuries (73.3%) was significantly more than that of contact (26.7%) injuries ($\chi^2=3.26$, $p<0.05$) and most of the injuries occurred in the dominant leg. Regarding the severity of the injuries, most of them were severe and needed surgery ($\chi^2=11.26$, $p<0.05$). Although the number of injuries during the match was greater than practice, the differences were not significant. The main causes of non-contact injuries were a sudden change in direction ($\chi^2=5.09$, $p<0.05$). Most of the injuries occurred in the away matches ($\chi^2=3.6$, $p<0.05$) and in the end of the competition season. No significant differences were found between playing positions. It is noteworthy that most of the injuries occurred during the first half of the match and during 31–45 min ($\chi^2=10.8$, $p<0.05$). It can be concluded that most of the ACL injuries are non-contact and sudden change in direction is the main cause of injury. This information can be used in planning preventive programmes.