

足関節捻挫既往を有する大学サッカー選手の身体機能特性

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【目的】

本研究の第1目的は、足関節捻挫の既往を有する大学サッカー選手における心理的不安感を含む身体機能特性を明らかにすること。第2目的は、心理的不安感と足関節捻挫既往の関連性を明らかにすること。

【方法】

対象は、大学男子サッカー選手122名とした。足関節捻挫の発生状況をアンケートにて調査を実施した。身体機能評価は、Straight leg raising test、Dorsiflexion Lunge Test、背屈、内返し、外返し等尺性筋力、足趾把持力、Y Balance Test、Side Hop Test、8 Hop Test、心理的不安感はCumberland Ankle Instability Tool(以下、CAIT)日本語版を実施し、足関節捻挫既往有無と各身体機能評価、心理的不安感の比較を行った。また、単変量分析による足関節捻挫既往のリスク値を推定した。

【結果】

足関節捻挫発生件数は139件、発生率は2.22件/1,000PHであった。過去1年の足関節捻挫既往あり足は60足、既往なし足は117足であった。過去1年以内の足関節捻挫回数は、2回以上が約60%以上を占め、復帰可能までに要した日数は、離脱なし19人(46%)、8~28日11人(27%)の順で多かった。各足の捻挫既往有無とCAITカテゴリーで有意差を認めた。(p<0.001、効果量 = 0.997)足関節捻挫のオッズ比は、CAIT \geq 28点を基準値とした場合、CAIT \leq 25点において有意差を認めた。(p<0.001、OR = 6.99)

【結論】

足関節捻挫既往を有する大学男子サッカー選手では、既往あり足では心理的不安感が有意に高いことが示唆された。さらに、CAIT \leq 25点群は、捻挫既往のオッズ比が約7倍であることが明らかになった。足関節捻挫を予防するためには、身体的機能配慮だけでなく心理的配慮も含めて評価する必要があることが示唆された。

Physical functional characteristics of college football players with previous ankle sprain

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[Purpose]

The primary objective of this study was to examine physical functional characteristics, including psychological anxiety, in college football players with a history of ankle sprain. The secondary objective was to explore the relationship between psychological anxiety and ankle sprain.

[Methods]

This study included 122 male college football players. The incidence of ankle sprain was assessed using a questionnaire. Physical function was evaluated using the straight-leg raising test, Dorsiflexion Lunge Test, dorsiflexion, inversion, eversion isometric muscle strength, toe flexor muscle strength, Y Balance Test, Side Hop Test, and 8 Hop Test. Psychological anxiety was evaluated using the Cumberland Japanese version of the Cumberland Ankle Instability Tool (CAIT). These assessments were used to evaluate physical function and psychological anxiety in relation to previous ankle sprain. Additionally, the risk of previous ankle sprain was estimated using univariate analysis.

[Results]

A total of 139 ankle sprains were recorded, resulting in an incidence rate of 2.22/1,000 player hours. Over the past year, 60 affected and 117 unaffected feet were reported. Approximately 60% of the participants had experienced two or more ankle sprains in the past year, 19 (46%) had no disqualification, and 11 (27%) returned to play 8–28 days after their sprains. Significant differences were found in the history of previous sprains in each foot and in the CAIT category. ($p < 0.001$, effect size = 0.997). The risk of ankle sprain was significantly different between participants with CAIT score ≤ 25 points and those with CAIT score ≥ 28 points ($p < 0.001$, OR = 6.99).

[Conclusion]

Male college football players with a history of ankle sprain exhibited significantly higher psychological anxiety. Furthermore, participants with CAIT score ≤ 25 points had approximately seven times the risk of a previous sprain. The findings suggest the importance of examining physical functional factors as well as psychological factors to prevent ankle sprains.