

Letters to the editor

Could ultrasound scan be a useful complement in studying the risk factors for sports ankle sprain?

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I read with great interest the article published in your 2010 issue Vol. IX (2) (pages 73-78) and, according to me, it was clinically innovative.

The study of the plantar vault may play an important role in ankle sprain prevention.

Criteria analysis of the examined sample was scientifically relevant in its precision and it was interesting to note how ankle sprain is still a frequent event in volleyball.

The article lets us hypothesize a positive correlation between sport career duration and the number of ankle sprains.

The consideration I would like to present to the esteemed colleague readers of this Journal is the following: would it be suitable to integrate data with a static and dynamic ankle ultrasound scan in those athletes?

According to Murley et al.¹, foot morphology (there-

fore the plantar vault) and muscles morphometry (of the peroneal muscles and tibialis muscles, which plays an important role in ankle stability) may influence the peroneal astragalic ligament tension.

Suitable ultrasound instrument may evaluate miotendinous structures and examine ankle biomechanical alterations such as impingement.

On the other hand, the ultrasound technique is inexpensive, quickly carried out in expert hands and of diagnostic precision in the anatomical field described above.

Margetić et al.² have indeed studied sensitivity and specificity of the ankle ultrasound scan and magnetic resonance imaging in acute lesions: they reported similar diagnostic accuracy percentage in both methods.

My final proposal is therefore to take up similar studies again, including the ultrasound evaluations in materials and methods.

References

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2. Margetić P, Pavić R. Comparative assessment of the acute ankle injury by ultrasound and magnetic resonance. Coll Antropol. 2012; 36(2):605-10.