

Current practice for safe return-to-play after lateral ankle sprain: A survey among French-speaking physicians

A. Aguilaniu^{1,2}, J.-L. Croisier^{1,2}, C. Schwartz^{1,2}, N. Dardenne³, P. D'Hooghe⁴, R. Collin¹, J.-F. Kaux¹, G. Martens¹

¹Department of Sport Sciences, ²Laboratory of Human Motion Analysis ³Department of public health, Biostatistics, University of Liege, ⁴Aspetar Hospital Medicine Department, Qatar

Purpose

This study aimed to understand the criteria used by physicians to decide on a safe return-to-play after a lateral ankle sprain.

Methods

SondageOnline

1. Development of a French survey reviewed by physicians experts
2. Accepted by the University Hospital Ethic Committee of Liège (Belgium)
3. An electronic link was sent to the physicians by e-mail address from the December 6th 2018 to the February 25th 2019

Population

Physicians n=109

With sports medical education n=50
 Without sports medical education n=59

Results (our survey)

Rehabilitation-Oriented- Assessment Recommendations (Delahunt et al. 2018)

Criteria used in daily practice

How many physicians use quantitative measures ?

Which Measures ? (n)

Criteria used in daily practice	How many physicians use quantitative measures ?	Which Measures ? (n)	Rehabilitation-Oriented- Assessment Recommendations (Delahunt et al. 2018)
pain 90% <i>*p=0.02 Physicians with sport specialty select significantly more a Numeric rating scale.</i>	51% 22% 29%	Numeric rating scale (50)	Numeric rating scale Foot and Ankle Disability Index (FADI)
functional 82% <i>*p=0.002 Physicians with sport specialty select significantly more the functional criteria.</i>	31% 14% 17%	Gait analysis Hop test Analysis of sport movement SEBT / YBT Bipodal balance Unipodal balance	Gait analysis Physical activity level Postural balance static and dynamic (BESS, FLT, SEBT..)
Instability 73%	4% 1% 3%	Cumberland Ankle Instability Tool : CAIT (1) Lower Extremity Functional Scale : LEFS (2)	Foot and Ankle Ability Measure (FAAM) Foot and Ankle Disability Index (FADI)
Range of motion 61% <i>* p=0.02 Physicians with sport specialty select significantly more the range of motion criteria.</i>	27% 10% 17%	Goniometer (18) Metric measures (1)	Weight bearing lunge test (dorsiflexion) Posterior-talar-glide test (ankle joint arthrokinematics)
Proprioception 47%	18% 4% 14%	Isokinetic machine (1) Goniometer (2) Myolux (6)	No recommendation
Laxity 39% <i>* p=0.01 Physicians without sport specialty select significantly more the laxity criteria.</i>	17% 13% 5%	Anterior drawer test (4) Talar-tilt-test (3)	Anterior drawer test (ATFL) Manual stress testing
Strength 38%	20% 7% 13%	Isokinetic machine (4) Hand-held-dynamometer (1) Myolux (3)	Hand-held dynamometer
Swelling 31%	24% 15% 9%	Figure-of-eight (3) Perimetric measures (4)	Figure-of-eight

Discussion & Conclusion

Although some physicians seem aware of assessing criteria to decide a safe return-to-play after a lateral ankle sprain, few of them are using the recommendations in daily practice. Assessing the patient with quantitative and qualitative measures could help the physicians to make a decision to return-to-play. However, up to now, few physicians use quantitative measures in daily practice. Sports medical education seems to be a factor that increase the use of quantitative methods but it is not significant for all criteria. It is also surprising to see the low consideration of the strength criteria which could be a risk factor to be re-injured.

Contact :
Aude Aguilaniu
aude.aguilaniu@uliege.be



@Orbi
Publication list

