Factors Associated with Good Recovery from Achilles Tendon Rupture at 1 Year Post Rupture

Introduction
Achilles tendon rupture (ATR) leads to long-term structural and functional impairments (1,2). Currently, the predictors of good recovery after ATR are poorly understood. Thus, we applied multivariable linear regression analysis to identify factors that explain good recovery.

Materials and Methods
A total of 35 unilateral ATR patients (6 females) were recruited. Structural, mechanical, and neuromuscular parameters were measured 1-year after rupture. Multivariable linear regression was used to predict differences in muscular parameters between limbs.

Results
Medial Gastrocnemius (MG)-tendon Δstiffness was significantly associated with both ΔMG (p=0.007) and Δlateral gastrocnemius (p=0.030) subtendon lengths. MG EMG% difference between limbs was associated with MG (p=0.003) and soleus (p=0.040) Δsubtendon lengths. The relative contribution of MG to plantarflexion was lower in the injured limb.

Conclusions
The increased contribution of FHL to total triceps surae EMG activity during submaximal contraction between limbs.

Disordered Eating, Exercise Addiction and Muscle Dysmorphia May Predict Low Energy Availability in Female Athletes

Low energy availability (LEA) describes a complex state of insufficient energy intake to support normal physiological function, after exercise energy expenditure has been accounted for. LEA is a common challenge in athletes and can stem from a range of causes. The aim of this study was to compare the occurrence of disordered eating (DE) as well as other less studied traits, e.g., exercise addiction (EA) and muscle dysmorphia (MD), in Icelandic female athletes considered at risk of LEA vs not.

Elite and sub-elite female athletes (n=60, age 24.1±7.8) from various sport disciplines completed the Low Energy Availability in Female Questionnaire (LEAF-Q), Exercise Disorder Examination – Questionnaire Short (EDE-QS), Exercise Addiction Inventory (EAI), and Muscle Dysmorphic Disorder Inventory (MDDI).

What Do Upper-Extremity Physical Performance Tests Actually Measure? Insights from an Electromyographical Study

Physical performance tests (PPTs) focus on multi-joint evaluations in which the athlete performs an activity that represents some aspects of athletic function. Evaluating the electromyographical (EMG) demands of those PPTs enables clinicians to select appropriate PPTs for their athletes.

Conclusion
S-MAS scores are higher in footballers with HSI compared to controls, suggesting sub-optimal sprint mechanics are associated with previous and possibly future HSI. The easy-to-use nature of the S-MAS means screening sprint running mechanics can be simply integrated into routine practice, potentially identifying footballers at HSI risk.