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ADDITIONAL INSIGHT INTO BIARTICULAR MUSCLE FUNCTION: THE INFLUENCE OF HIP FLEXOR FATIGUE ON RECTUS FEMORIS ACTIVITY AT THE KNEE

By

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Abstract

We evaluated the compensatory adaptations in muscle regionalization and synergist activity after fatiguing a biarticular muscle at one joint with different muscle lengths. Eleven men (mean \pm SD age = 23 ± 3 years) performed 50 maximal concentric isokinetic contractions of the dominant hip flexors on two occasions. For one trial, the knee joint was fully extended. For the other, the knee joint was fixed at 70° . Maximal voluntary contractions of the knee extensors were performed immediately before and after the hip flexion fatigue protocol while bipolar surface electromyographic signals were detected from the vastus lateralis and at five points along

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