



Sep 29, 2022

Version 1

Do differences exist in the hamstring muscles architectural characteristics of elite-level male and female rugby players V.1

DOI

dx.doi.org/10.17504/protocols.io.kxygx9e4kg8j/v1

Kevin Cronin¹, Shane Foley¹, Sean Cournane¹, Eamonn Delahunt¹

¹University College Dublin



Kevin Cronin

University College Dublin

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.kxygx9e4kg8j/v1>

Protocol Citation: Kevin Cronin, Shane Foley, Sean Cournane, Eamonn Delahunt 2022. Do differences exist in the hamstring muscles architectural characteristics of elite-level male and female rugby players. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.kxygx9e4kg8j/v1>

License: This is an open access protocol distributed under the terms of the **[Creative Commons Attribution License](#)**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited



Protocol status: Working

We use this protocol and it's working

Created: September 29, 2022

Last Modified: September 29, 2022

Protocol Integer ID: 70656

Keywords: Hamstring, Architecture, Injury, Fascicle, Pennation Angle, Rugby, hamstring muscles architectural characteristic, female rugby players hamstring injury, hamstring muscle architecture, hamstring muscle, elite rugby union player, muscle architecture, hamstring injury, female rugby union player, muscle thickness, bicep femoris long head, bicep femoris short head, bicep femori, fascicle length, high injury burden, male, prevalent in male

Abstract

Hamstring injuries carry a high injury burden and are more prevalent in males than females. This study is designed as a cross-sectional study with two groups. Forty elite rugby union players (20 males; 20 females) will have their hamstring muscle architecture (fascicle length, pennation angle and muscle thickness) measured using B-mode ultrasound. Muscle architecture is a modifiable risk factor associated with hamstring injuries. The aim of this study will be to determine whether differences exist in the hamstring muscles (Bicep Femoris long head, Bicep Femoris short head, Semitendinosus and Semimembranosus) architectural characteristics of elite- level male and female rugby union players.

Troubleshooting

