Version 1

Sep 29, 2022

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

Kevin Cronin[1], Shane Foley[1], Sean Cournane[1], Eamonn Delahunt[1]

[1]University College Dublin

1 *Works for me* Share

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

Kevin Cronin
University College Dublin

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.

DOI

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

KEYWORDS

Hamstring, Architecture, Injury, Fascicle, Pennation Angle, Rugby

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

Citation: Kevin Cronin, Shane Foley, Sean Cournane, Eamonn Delahunt Do differences exist in the hamstring muscles architectural characteristics of elite-level male and female rugby players https://dx.doi.org/10.17504/protocols.io.kxygx9e4kg8j/v1

This is an open access protocol distributed under the terms of the **Creative Commons Attribution License** (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium,

CREATED

Sep 29, 2022

LAST MODIFIED

Sep 29, 2022

PROTOCOL INTEGER ID

70656

Citation: Kevin Cronin, Shane Foley, Sean Cournane, Eamonn Delahunt Do differences exist in the hamstring muscles architectural characteristics of elite-level male and female rugby players https://dx.doi.org/10.17504/protocols.io.kxygx9e4kg8j/v1

This is an open access protocol distributed under the terms of the **Creative Commons Attribution License** (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium,