

Queensland University of Technology Brisbane Australia

This is the author's version of a work that was submitted/accepted for publication in the following source:

Opar, David A., Williams, Morgan, Timmins, Ryan, Hickey, Jack, Duhig, Steven, & Shield, Anthony (2014) Eccentric hamstring strength and hamstring injury risk in Australian footballers. *Medicine & Science in Sports & Exercise, 46*.

This file was downloaded from: http://eprints.qut.edu.au/75526/

© Copyright 2014 American College of Sports Medicine

Notice: Changes introduced as a result of publishing processes such as copy-editing and formatting may not be reflected in this document. For a definitive version of this work, please refer to the published source:

https://doi.org/10.1249/MSS.00000000000465

Group	Limb	Absolute eccentric hamstring strength			Relative eccentric hamstring strength			Between limb imbalance		
		(N)			$(N.kg^{-1})$			(%)		
		Start of	End of	In-season	Start of	End of	In-season	Start of	End of	In-season
		preseason	preseason		preseason	preseason		preseason	preseason	
	Injured	$246 \pm 79^*$	$284 \pm 77*$	$256 \pm 157^{\#}$	$3.04 \pm 0.97*$	$3.51 \pm 0.95*$	$3.16 \pm 1.93^{\#}$			
Injured		(n=27)	(n=17)	(n=2)	(n=27)	(n=17)	(n=2)	21.2 ± 23.8	13.1 ± 9.6	$15.6\pm4.9^{\#}$
	Uninjured	273 ± 89	$292\pm71*$	$292\pm169^{\#}$	$3.37 \pm 1.10^{*}$	$3.60 \pm 0.87*$	$3.61\pm2.08^{\#}$	(n=27)	(n=17)	(n=2)
		(n=27)	(n=17)	(n=2)	(n=27)	(n=17)	(n=2)			
Uninjured	Average of	301 ± 84	330 ± 73	323 ± 80	3.81 ± 1.06	4.18 ± 0.92	4.09 ± 1.01	18.2 ± 20.8	10.5 ± 10.0	10.6 ± 11.0
	left and right	(n=159)	(n=157)	(n=153)	(n=159)	(n=157)	(n=153)	(n=159)	(n=157)	(n=153)

Table 1. Nordic hamstring exercise force variables from hamstring strain injured and uninjured elite Australian footballers.

Data presented as mean \pm standard deviation. *Indicates significantly different to the uninjured group (p<0.05). [#]Indicates sample size from the injured group too small to make valid comparisons. Between limb imbalance determined as an absolute percentage (i.e. unidirectional)