

**UNIVERSIDADE FEDERAL DE CIÊNCIAS DA SAÚDE DE  
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CURSO DE FISIOTERAPIA**



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**Match exposure of professional  
women's football players preceding  
muscle strain injuries: a case series  
study**

**Universidade Federal de Ciências da Saúde  
de Porto Alegre**

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# **Match exposure of professional women's football players preceding muscle strain injuries: a case series study**

Trabalho de Conclusão de Curso de Fisioterapia, da Universidade Federal de Ciências da Saúde de Porto Alegre, como requisito parcial para obtenção do título de Bacharel em Fisioterapia

Orientador: Bruno Manfredini Baroni  
Coorientador: Gabriela Bissani Gasparin

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LETÍCIA ULIANA BRANDALISE

**MATCH EXPOSURE OF PROFESSIONAL WOMEN'S FOOTBALL  
PLAYERS PRECEDING MUSCLE STRAIN INJURIES: A CASE  
SERIES STUDY.**

Trabalho final, apresentado a Universidade Federal de Ciências da Saúde de Porto Alegre, como parte das exigências para a obtenção do título de Bacharel em Fisioterapia.

Porto Alegre, 5 de dezembro de 2024.

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## RESUMO

**Objetivos:** Examinar a exposição aos jogos no mês anterior às lesões musculares entre jogadoras de futebol profissional feminino.

**Desenho:** Estudo de série de casos.

**Configuração:** Pesquisa online multicêntrica.

**Participantes:** Jogadoras de futebol profissional feminino que sofreram uma lesão muscular durante a temporada de 2022.

**Principais medidas de resultado:** Esta é uma análise secundária de um estudo prospectivo de coorte realizado em uma temporada envolvendo quatro clubes brasileiros de elite.

**Resultados:** 23 lesões musculares foram sofridas por 17 jogadoras:  $25\pm 5$  anos,  $168\pm 8$  cm de altura e  $62\pm 7$  kg de massa corporal. O local mais afetado foi a parte posterior da coxa (11 lesões, 48% do total), seguido pelos adutores (7 lesões, 30%) e quadríceps (4 lesões, 22%). Em média, as atletas jogaram  $2,0\pm 1,6$  partidas ( $126\pm 128$  minutos),  $1,0\pm 1,0$  partida ( $75\pm 88$  minutos) e  $1,0\pm 0,8$  partidas ( $39\pm 61$  minutos) nos 30, 15 e 7 dias anteriores às lesões musculares, respectivamente. Das 23 lesões, nove (39%) ocorreram sem qualquer exposição a jogos nos 30 dias anteriores. O número máximo de partidas jogadas nos 30 dias antes da lesão foi quatro.

**Conclusões:** A variabilidade na participação em jogos entre as atletas sugere que tanto a exposição insuficiente quanto a excessiva podem aumentar o risco de sofrer uma lesão muscular.

**Palavras-chave:** Feminino; Futebol; Lesão muscular.

## ABSTRACT

**Objectives:** To examine the match exposure in the month preceding muscle injuries among professional women's football players.

**Design:** Case series study

**Setting:** On-line multicenter survey.

**Participants:** Professional women's football players who sustained a muscle strain injury during the 2022 season.

**Main outcome measures:** This is a secondary analysis of a one-season prospective cohort study involving four elite Brazilian clubs.

**Results:** 23 muscle strain injuries were sustained by 17 players:  $25\pm 5$  years old,  $168\pm 8$  cm height and  $62\pm 7$  kg body mass. The most affected site was the hamstrings (11 injuries, 48% of the total), followed by the adductors (7 injuries, 30%), and quadriceps (4 injuries, 22%). On average, the athletes played  $2.0\pm 1.6$  matches ( $126\pm 128$  minutes),  $1.0\pm 1.0$  matches ( $75\pm 88$  minutes), and  $1.0\pm 0.8$  matches ( $39\pm 61$  minutes) in the 30, 15, and 7 days leading up to the muscle injuries. Of the 23 injuries, nine (39%) occurred without any match exposure in the preceding 30 days. The maximum number of matches played within 30 days before the injury was four.

**Conclusions:** The variability in match participation among athletes suggests that both insufficient and excessive exposure can increase the risk of sustaining a muscle injury.

**Keywords:** Female; Soccer; Muscular injury.

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