LITERATURE REVIEW

Up for the tackle? The pelvic floor and rugby

G. M. Donnelly

Cardiff School of Sport and Health Sciences, Cardiff Metropolitan University, Cardiff, and Private Practice, Maguiresbridge, Enniskillen, UK

K. Bø

Department of Sports Medicine, Norwegian School of Sport Sciences, Oslo, and Department of Obstetrics and Gynecology, Akershus University Hospital, Lørenskog, Norway

L. B. Forner

School of Health and Rehabilitation Sciences, The University of Queensland, and Private Practice, Brisbane, Queensland, Australia

A. Rankin

Sports Medicine, Sports Medicine NI, Belfast, UK

I. S. Moore

Cardiff School of Sport and Health Sciences, Cardiff Metropolitan University, Cardiff, UK

Abstract

The pelvic floor and its associated disorders are a unique and often overlooked aspect of women's rugby. This review discusses relevant biopsychosocial considerations specific to the pelvic floor and rugby. Pelvic floor disorders (PFDs) can present at any time across the female lifespan, but are more prevalent during pregnancy and postpartum. This is because of the substantial physiological and anatomical changes experienced during pregnancy and vaginal childbirth. Consequently, PFDs can impact a player's ability to perform, maintain engagement with or return to rugby as a result of symptoms. Players need to be informed, supported and guided through focused pelvic floor muscle training to condition the muscles and "ready" them for the varied demands of rugby. Health and fitness professionals should understand the risk of PFDs across the female lifespan, and screen players for symptoms when supporting them to maintain or return to rugby. Rugby players who have symptoms of PFDs should be signposted to specialist services and/or resources to manage their symptoms. Once engaging in rugby training, ongoing evaluation of player load tolerance and implementation of individualized strategies to support managing rugby-related loads to the pelvic floor should be considered. Finally, surveillance and research focusing specifically on rugby players and pelvic floor function are needed.

Keywords: female athlete, genital hiatus, incontinence, lifespan, perinatal, return to sport.

Citation: Donnelly G. M., Bø K., Forner L. B., Rankin A. & Moore I. S. (2024) Up for the tackle? The pelvic floor and rugby. *Journal of Pelvic, Obstetric and Gynaecological Physiotherapy* **136** (Spring), 15–33. [Reprinted from the *European Journal of Sport Science* (2024) **42** (12), 1719–1734.]

DOI: 10.62399/COMW9409.

Introduction

The pelvic floor is a unique and often overlooked characteristic of women's rugby. Taking

Correspondence: G. M. Donnelly, 7 Drumadagarve Road, Maguiresbridge, Enniskillen BT94 4NX, UK (e-mail: grainne@absolute.physio).

a cupuliform shape, the pelvic floor muscles (PFMs) span the outlet at the base of the pelvis (Herschorn 2004; Bordoni *et al.* 2023). Their role is multifactorial and includes: (1) maintaining continence (bladder and bowel); (2) facilitating excretion (bladder and bowel); (3) supporting

© 2024 The Authors 15