

# 401-PELVIC FLOOR MUSCLE TRAINING REDUCES URINE LOSS IN FEMALE FOOTBALL ATHLETES

Alice Carvalhais<sup>1</sup>, Mónica Rodrigues<sup>2</sup>, Renato Natal Jorge<sup>3</sup>, Margarida Ferreira<sup>4</sup>

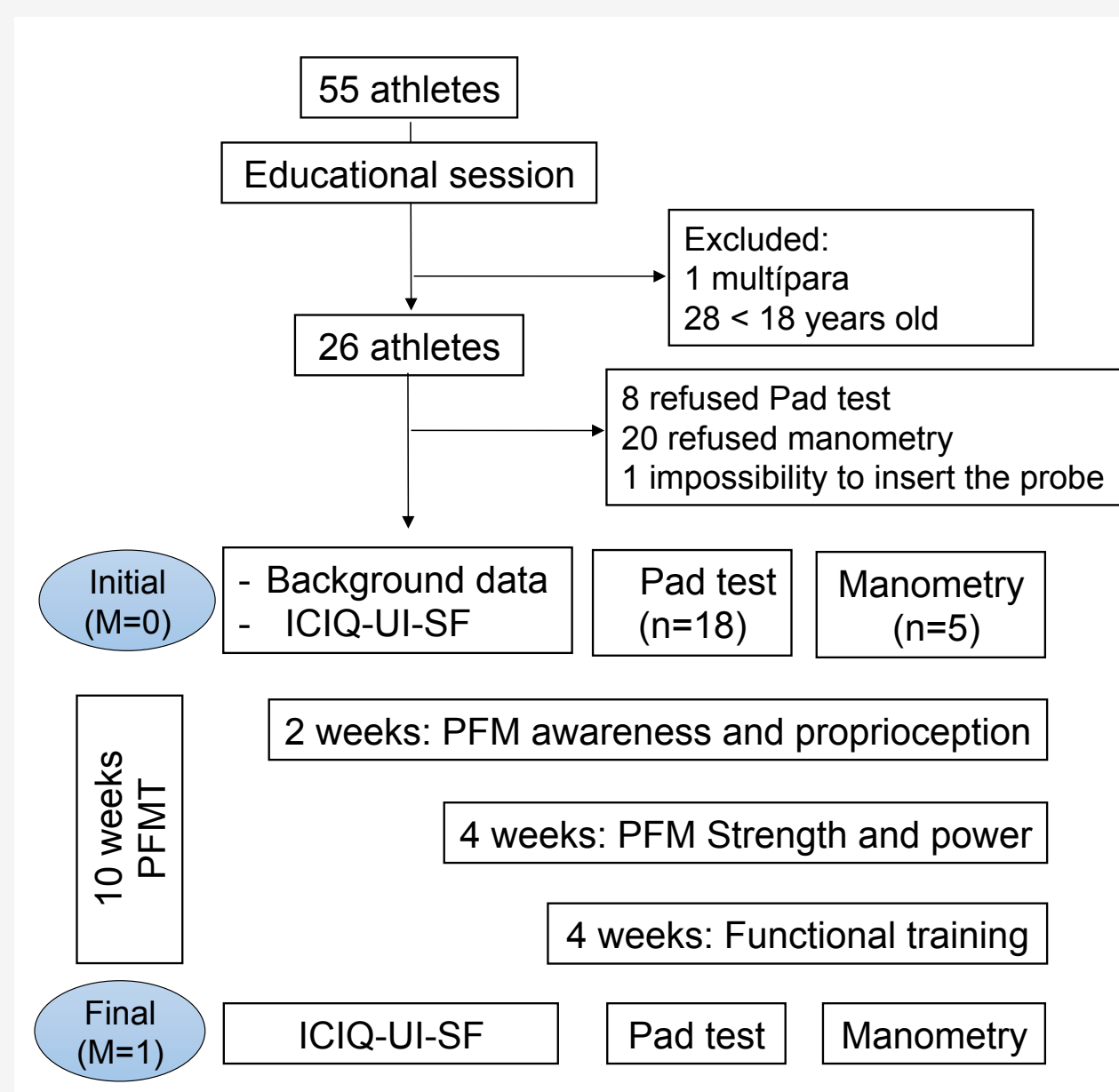
<sup>1</sup> LAETA, INEGI, CESPU-IPSN, Portugal, <sup>2</sup> CESPU-IPSN, Portugal, <sup>3</sup> LAETA, INEGI, FEUP, Portugal, <sup>4</sup> CESPU-IPSN, Hospital Senhora da Oliveira -Guimarães, Portugal

High prevalence rates of urinary incontinence (UI) in athletes has been reported. Few studies have been published regarding UI intervention protocols.

**Aim:** To evaluate the prevalence of UI and analyse the impact of pelvic floor muscle training (PFMT) on urine loss in female football athletes.

**Conclusion:** Prevalence of UI among female football players was high. After 10 weeks of PFMT the amount of urinary leakage has decreased and pelvic floor muscle strength has increased.

## Quasi-experimental study



Study design flowchart

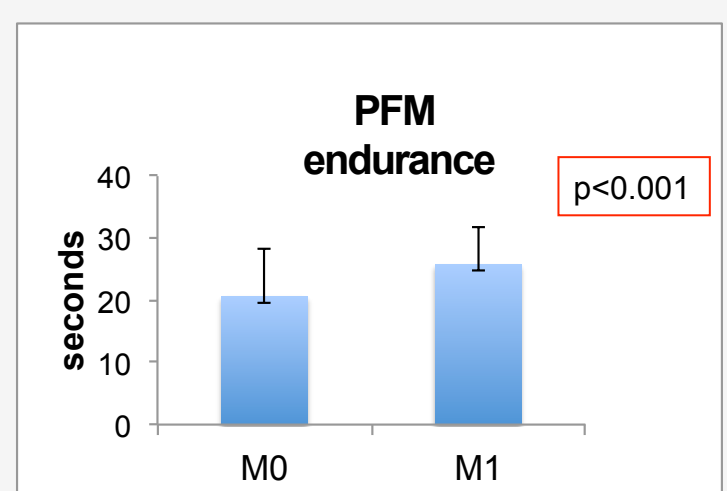
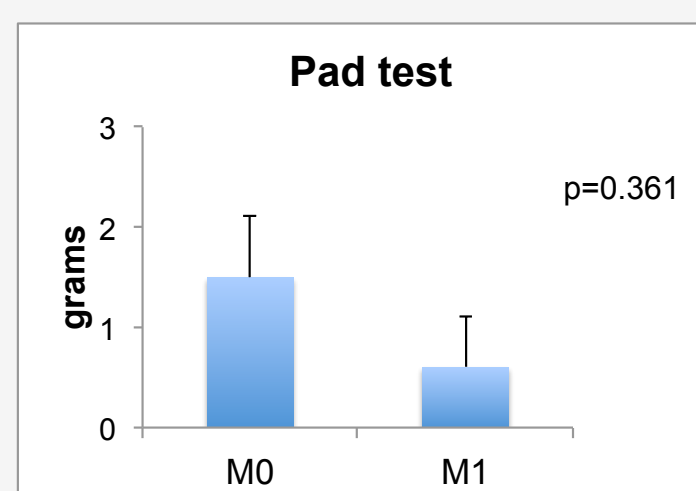
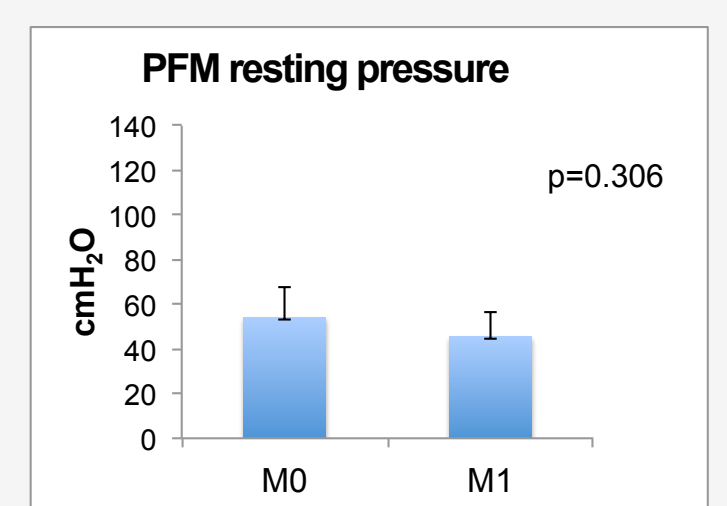
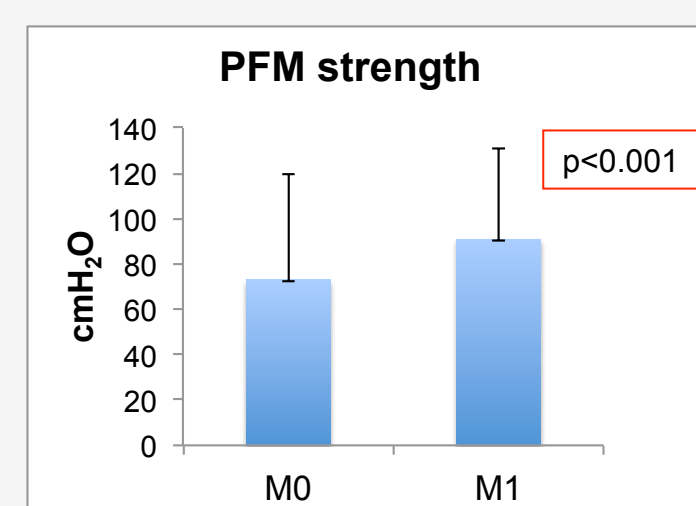
## PFMT protocol



## Results

### Participants urinary incontinence

(n= 26)	Initial n (%)	Final n (%)
Any urinary incontinence	11 (42.3)	8 (30.8)
Stress urinary incontinence	9 (81.8)	5 (62.5)
Urgency urinary incontinence	2 (18.2)	3 (37.5)



## Participants characteristics

(n= 26)	Median (IQR)
Age (years)	20.0 (7.0)
BMI	22 (3.5)
Sports practice duration (y)	3.0 (0)
Sports practice frequency (h/w)	2.0 (1.0)
	n (%)
Urinary infection (yes)	
Rarely	8 (30.8)
Frequently	1 (3.8)
Constipation (Yes)	0 (0)
Urinary incontinence (yes)	11 (42.3)

BMI: body mass index; h: hours; IQR: Interquartile range; UI: urinary incontinence; w: week; y: years

## Data collection



**Questionnaires**  
- Background variables  
- ICIQ-UI-SF



20 min Pad test (g)



**PFM variables:**   
- Resting pressure (cmH<sub>2</sub>O)  
- MVC (cmH<sub>2</sub>O)  
- Endurance (s)

UI is high among female football players. PFMT could be incorporated into their training programmes. More research is needed to determine optimal PFMT protocols for athletes.