



**LA TROBE**  
UNIVERSITY

# Clinical assessment & key management strategies for gluteal and proximal hamstring tendinopathies

Rachael Cowan  
Physiotherapist (PhD submitted) & Anatomist

Anthony Nasser APA Sports Physiotherapist  
(PhD candidate)

La Trobe University Sport and Exercise Medicine Research Centre (LASEM)

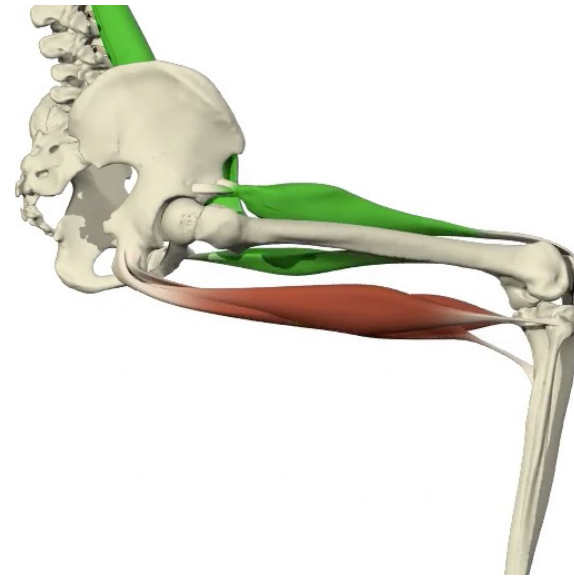
# Outline

## Key diagnostic information

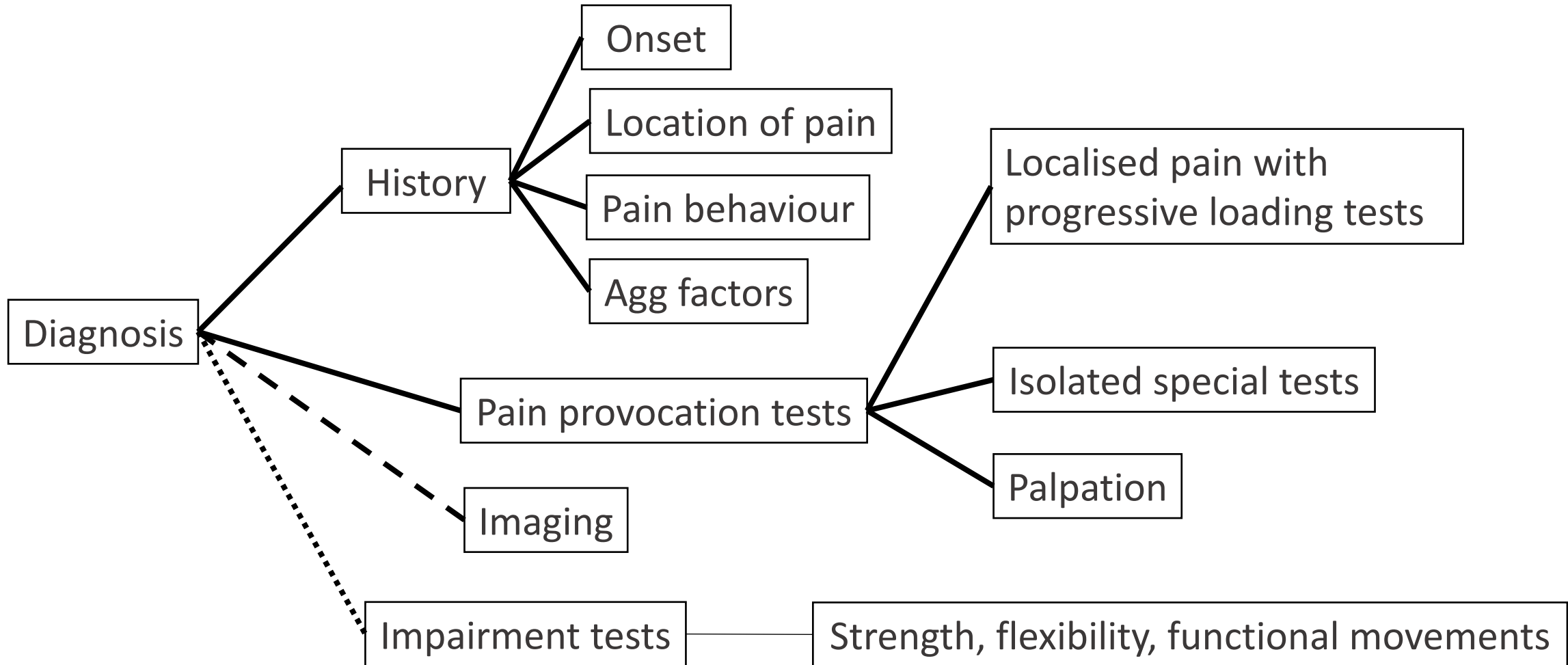
- Patient interview
- Physical examination

## Management

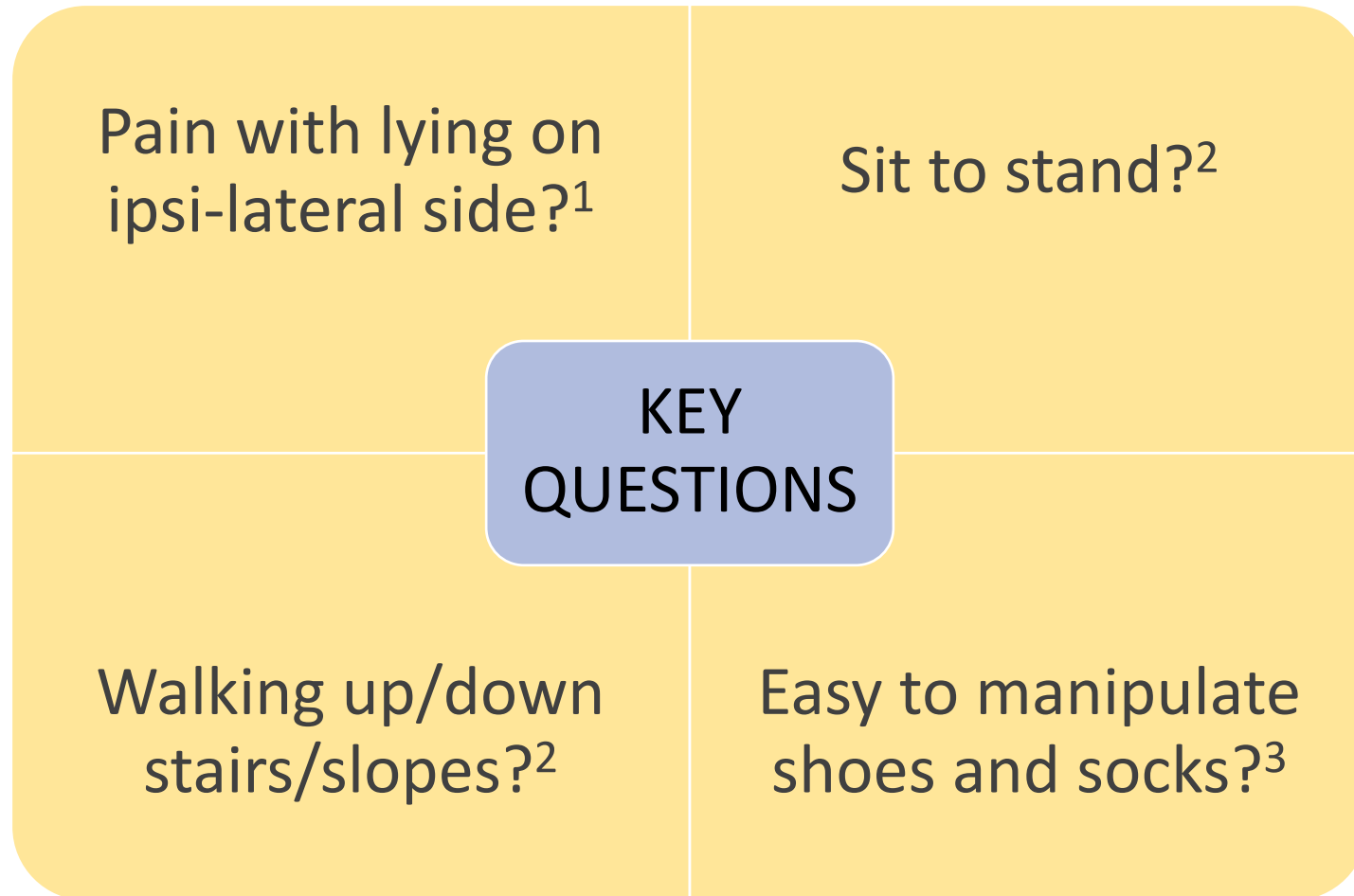
- Education
- Progressive exercise



# Diagnosis

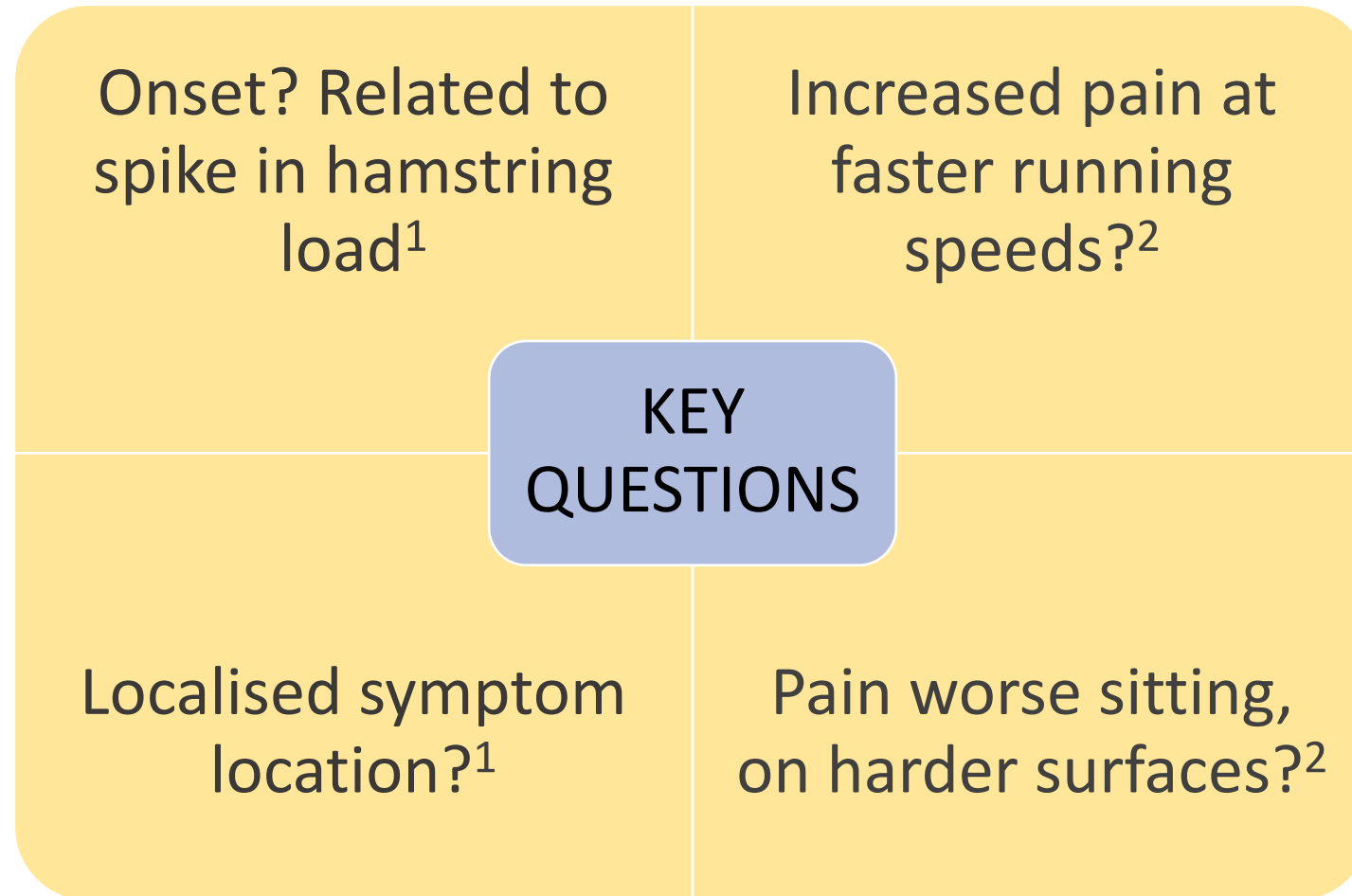


# Gluteal tendon – subjective



1 – Rasmussen et al. 1985;  
Rompe et al. 2009; Schapira et al. 1986  
2 – Woodley et al. 2008  
3 – Fearon et al. 2013

# Proximal hamstring tendon – subjective



1 - Goom et al. 2016  
2 - Nasser et al. 2021

# Gluteal tendon – objective

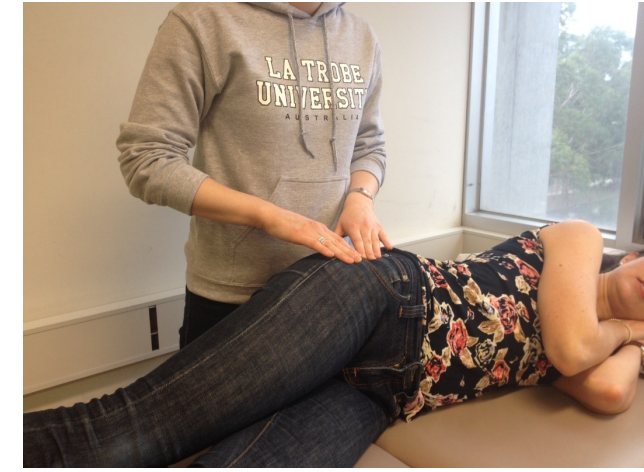
- Battery of tests to rule in
- Highest diagnostic test accuracy = 4 x tests in images<sup>1</sup>
- Palpation = most sensitive for GMed tendon<sup>2</sup>
- Modified external derotation<sup>3</sup>

## Demystifying the Clinical Diagnosis of Greater Trochanteric Pain Syndrome in Women

Charlotte Ganderton, MPhysio Prac (Hons),<sup>1</sup> Adam Semciw, PhD,<sup>1,2</sup> Jill Cook, PhD,<sup>1</sup> and Tania Pizzari, PhD<sup>1</sup>



(Lequesne et al., 2008)



1 – Ganderton et al. 2017

2 – Fearon et al. 2013; Ganderton et al. 2017; Grimaldi et al. 2017

3 – Cowan et al. 2021

# Proximal hamstring tendon – objective

Bent knee stretch test + modified bent knee stretch test<sup>1</sup>

Progressive load response tests<sup>2</sup>

- Double leg body of leg flexion
- Single leg arabesque

Bridge in hip flexion

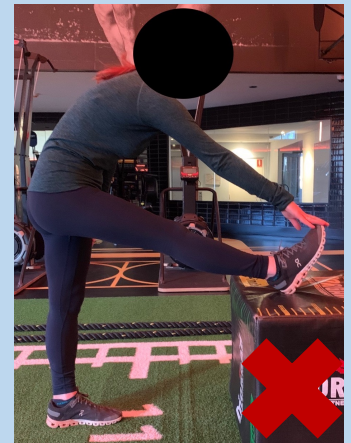
Palpation



1 = Cacchio et al. 2012

2 = Goom et al. 2016

# Education – avoid tendon compression & load management



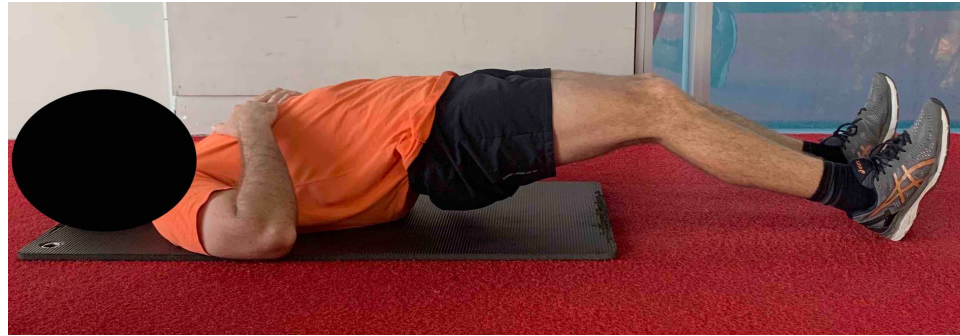


# Gluteal tendon loading



# Proximal hamstring tendon loading

- Progressive heavy load
- Isolate the hamstrings
- Hip neutral/near neutral
- 2-3 exercises 3 x week
- Low stability demand



# Kinetic chain strengthening



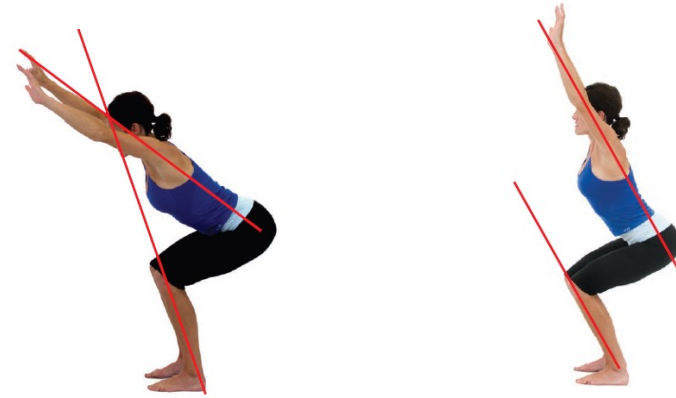
# Functional / dynamic control



# Issues confronted in the gym

## Back squat

- Excessive trunk flexion/depth
- Consider front squat/goblet squat



## Dead lift

- Take care re-introducing trunk on body exercises
- Range of motion

## Leg press

- Hip flexion range of motion ++
- ? Sport requirements
- ? Concurrent hip joint pathology





# Thank you

Rachael Cowan | Anthony Nasser

R.Cowan@latrobe.edu.au | A.Nasser@latrobe.edu.au