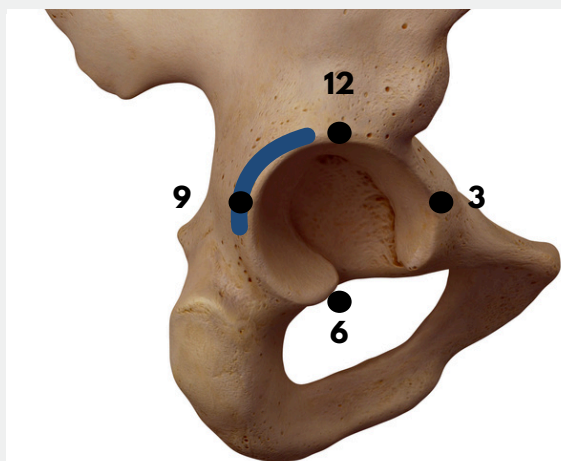


HIP FACTS FROM THE LITERATURE #89

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THE POSTERIOR HIP CAPSULE & ISCHIOFEMORAL LIGAMENT PROVIDE CRITICAL POSTERIOR HIP STABILITY

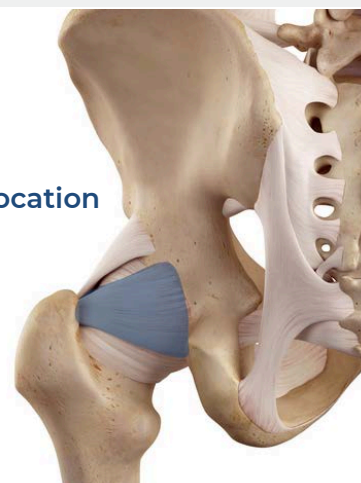


Origin of ISFL:
From $\approx 8.45 - 11.45$ on the acetabular rim (clockface)

ISCHIOFEMORAL LIGAMENT (ISFL)

Resists hip IR especially in flexion
Superior fibres resist ADD
Inferior fibres resist hip flexion
Key restraint against posterior translation of the femoral head & dislocation in hip flexion & IR
Critical for resisting hip distraction

Originates from ischium & posteroinferior acetabular rim
Spirals superolaterally, blending with ZO & inserting at the base of the greater trochanter



IR: Internal Rotation; ADD: Adduction; CSA: Cross Sectional Area; ZO: Zona Orbicularis; OIG: Obturator Internus-Gemelli; OE: Obturator Externus

OTHER PFL FACTS:

- Largest acetabular footprint
- CSA: $\approx 19 - 30\text{mm}^2$
- Reinforced by OIG & OE muscles & tendons
- Proprioceptive function

The posterior hip capsule and ischiofemoral ligament provide critical posterior hip stability in hip flexion and internal rotation. The superior fibres also limit hip adduction, and horizontal adduction in a position of hip flexion. This ligament will be even more important for posterior femoral head support if the bony coverage (think dysplasia) or labrum (labral tear) is insufficient.

The ischiofemoral ligament will be in the firing line when someone falls onto their knee, especially if they have cam morphology (FAI) or femoral retroversion - early anterior impingement can result in levering of the femoral head out the back of the socket. This ligament also contributes substantially to resisting against a distraction force (think drag injuries, hanging upside down by the knee - gymnastics, pole-fitness - yes it's popular!, and circus training - also popular now for fitness especially in ex-dancers and gymnasts).

Laxity (hypermobility, hEDS) or deficiency (usually iatrogenic, or post-trauma) of the ischiofemoral ligament reduces posterior stability and increases the risk of posterior translation and dislocation, both in the native and prosthetic hip.

The posterior cuff, particularly the obturator internus - gemelli complex, will be key muscles to target to improve local posterior microinstability.

Xu W, Ghaziani AO, Khanduja V, et al. Anatomy, biomechanics and function of the hip capsule: A narrative review from a surgeons perspective. Clin Biomech (Bristol). 2025 Jul;127:106588.