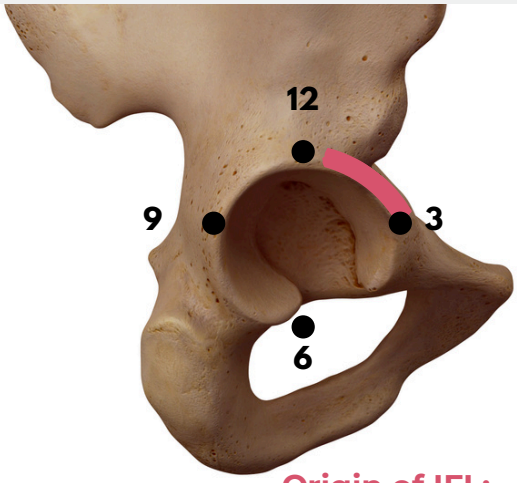
Dr. Alison Grimaldi
PHYSIOTHERAPIST, RESEARCHER & EDUCATOR

HIP FACTS FROM THE LITERATURE #87

THE ANTERIOR HIP CAPSULE & ILIOFEMORAL LIGAMENT PROVIDE CRITICAL ANTERIOR HIP STABILITY

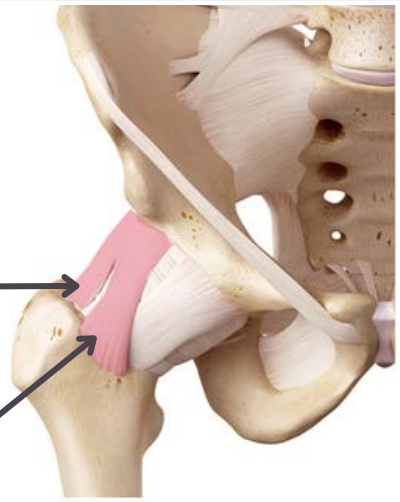


Origin of IFL:
From 12.35 - 3 o'clock on the acetabular rim

ILIOFEMORAL LIGAMENT (IFL)
Resists hyperextension & ER
Restraint to IR only in full EXT
Key restraint to anterior translation of the femoral head

Lateral (superior) Limb
Resists ER, *in neutral/flexion
High tension in max ER + ADD
Resists FABER position

Medial (inferior) Limb
Resists Hip EXT, *in ER



ER: External Rotation; IR: Internal Rotation; EXT: Extension; ADD: Adduction; FABER:Flexion-Abduction-External Rotation; CSA: Cross Sectional Area; GMin: Gluteus Minimus; Rec Fem: Rectus Femoris

OTHER ILIOFEMORAL LIGAMENT FACTS:

- *Strongest capsular ligament*
- *Cross-sectional area: 50-60mm^2*
- *Reinforced by GMin, Rec Fem, iliopsoas & iliocapsularis*
- *Proprioceptive function*

The anterior hip capsule and iliofemoral ligament provide critical anterior hip support. The iliofemoral ligament is shaped like an inverted Y - sometimes referred to as the Y Ligament of Bigelow.

The more vertical medial limb is very important for resisting hip extension, particularly when accompanied by external rotation, while the more lateral/superior limb comes on tension during external rotation in either an adducted or FABER position.

Deficiency of this ligament significantly reduces passive anterior support for the femoral head. Deficiency may be related to i) global joint laxity, ii) focal overload related to an acute injury, or repetitive, forceful end-range actions (think back hip of a throwing athlete), or iii) iatrogenic injury incurred during hip surgeries such as arthroscopy.

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.

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The impact of surgery on the anterior capsuloligamentous structures is important to be mindful of, as the iliofemoral ligament may be cut during a capsulotomy - opening of the capsule (even though you are only seeing little portholes at the skin level). Many surgeons do not repair the capsule after arthroscopy, leaving the hip at higher risk of anterior instability and even dislocation, particularly in the first 3 months post surgery.

So,
1. ask for the operative report, and
2. think twice about whether you really want to prescribe prone or standing hip extension exercises past neutral in the early post hip arthroscopy period.

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