

Ausbildungsseminar Sportorthopädie,
8.11.2013

Athletic pubalgia

C. Felsing



Synonyme

- “Weiche Leiste”
- “Sportlerleiste”

- “sports hernia”
- “Gilmore’s groin”
- “hockey hernia”
- “hockey groin”
- “groin disruption”

- CMI (“core muscle injury”)¹



Definition

“A sports hernia is a painful, soft tissue injury that occurs in the groin area”¹



Epidemiologie

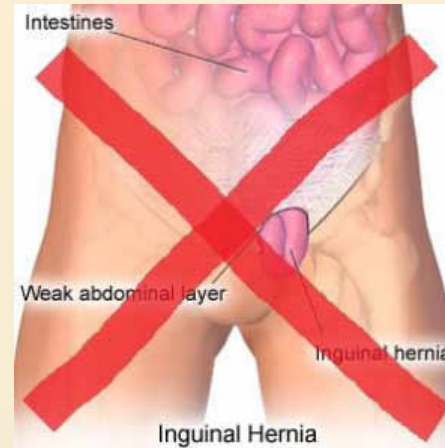
Fußball: 5-23%

NBA ¹: 14,6%

Ice Hockey²: 10-43%



- 1) Timothy J. Jackson, Chad Starkey, Danielle McElhiney and Benjamin G. Domb, *Orthopaedic Journal of Sports Medicine* 2013 1:
- 2) Timothy F. Tyler, MS, PT, ATC,[†] Holly J. Silvers, MPT,[‡] Michael B. Gerhardt, MD,[‡] and Stephen J. Nicholas, MD[†], *Sports Health*. 2010 May;



- Keine Hernie!!!
- „Core muscle injuries“
- Muskuloskelettale Verletzungen d. vorderen Beckens
- Meist Hyperextensions/Hyperabduktions – Verletzungen
- Akute Verletzung oder chron. Rep. Mikrotraumata (overuse)
- Viele Ursachen¹

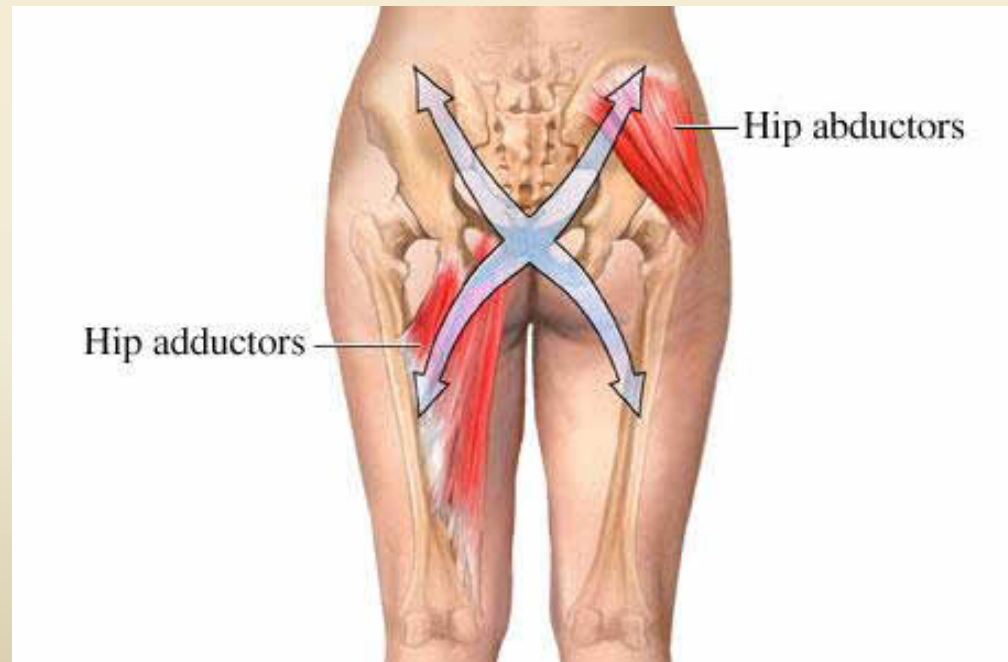
- Sportarten mit raschen Richtungswechseln (Stop and go),
 - Fußball, Rugby, Handball, (Eis-)Hockey, Am. Football
- Sportarten mit Hüftrotationsbewegungen
 - Hürdenlauf, Schifahren,
 - Turnen, Gymnastik



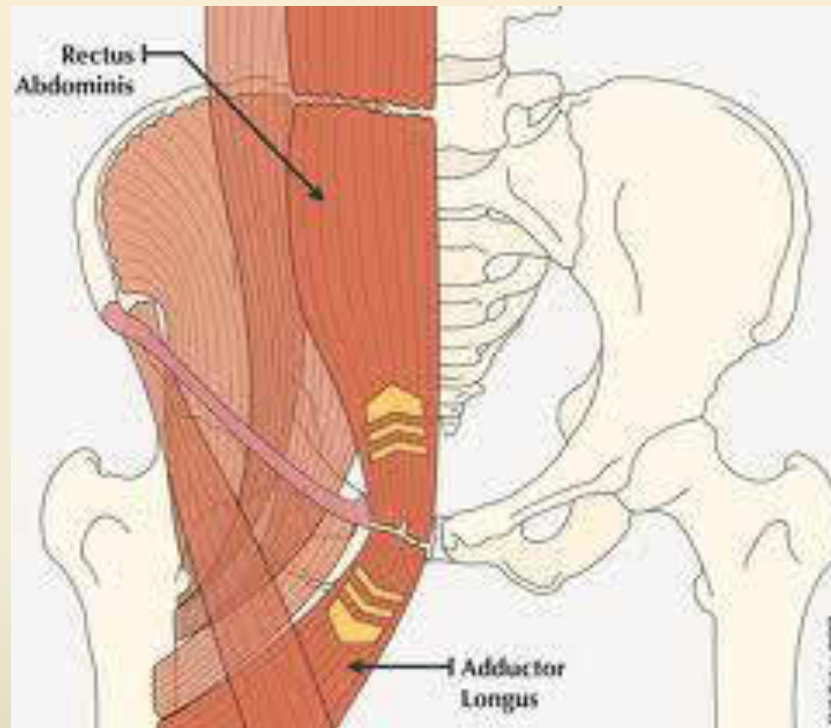
Muskuläre Dysbalance am „pubic joint“

Add-abd strength ratio:

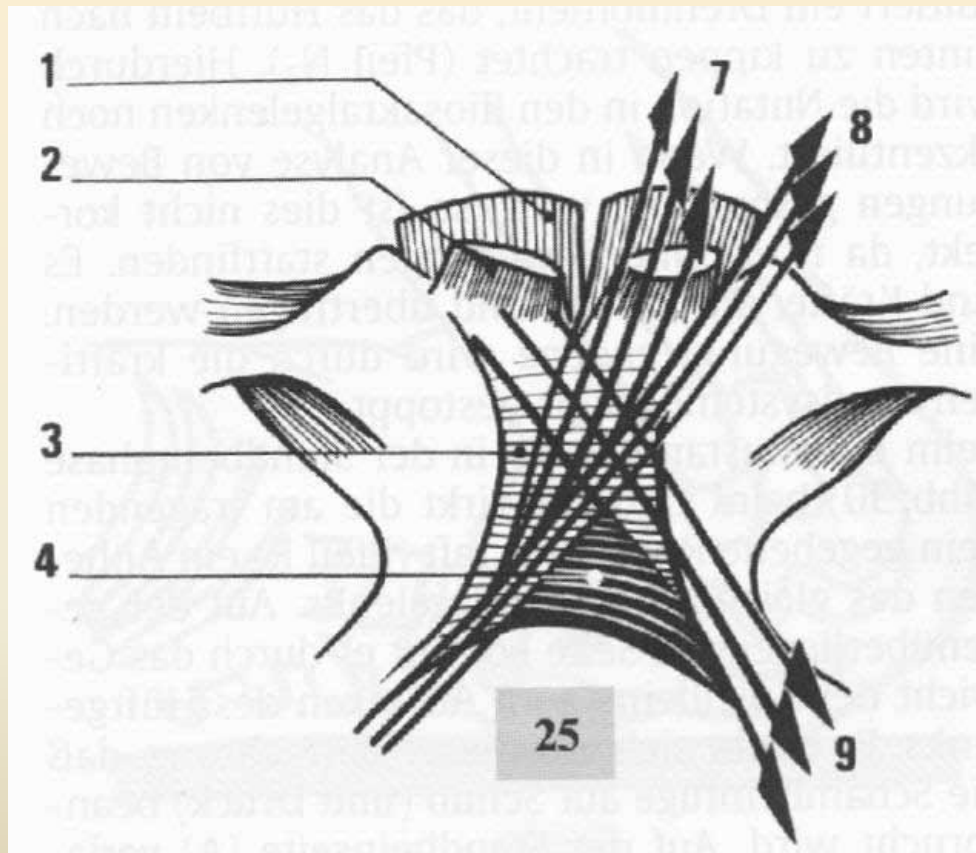
Add. < 80% Abd. Kraft: 17x erhöhtes Risiko für Adduktorenzerrung¹



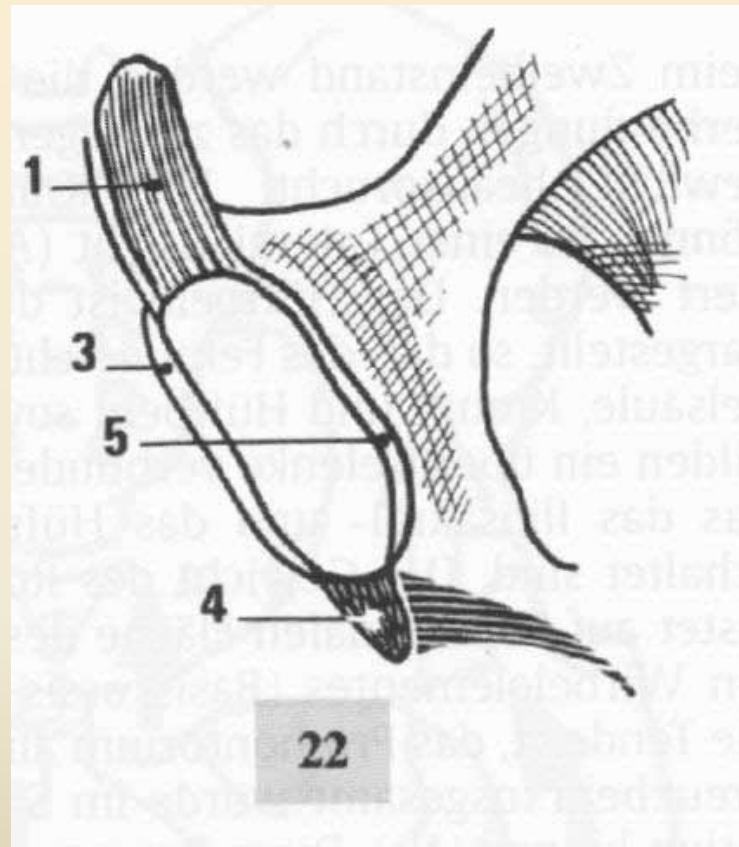
Anatomie



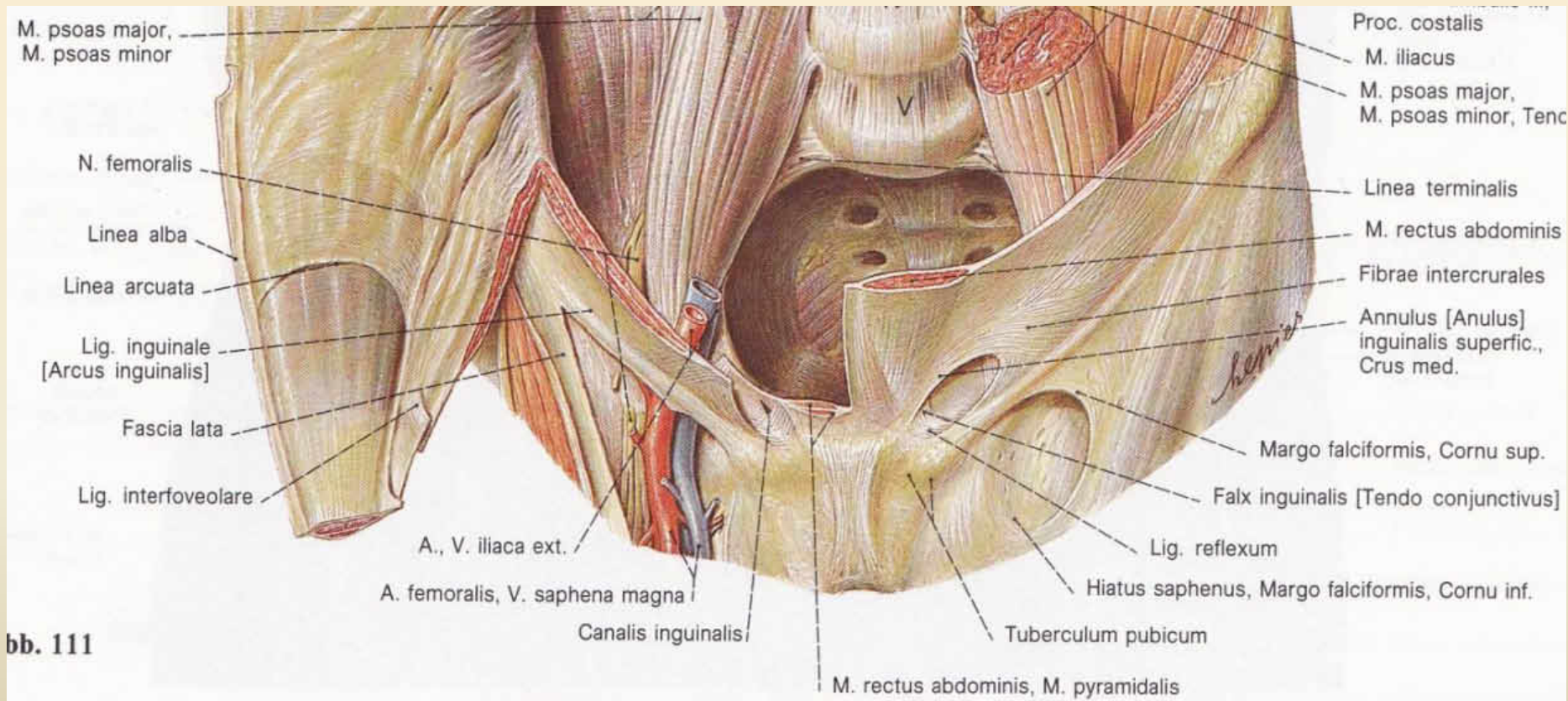
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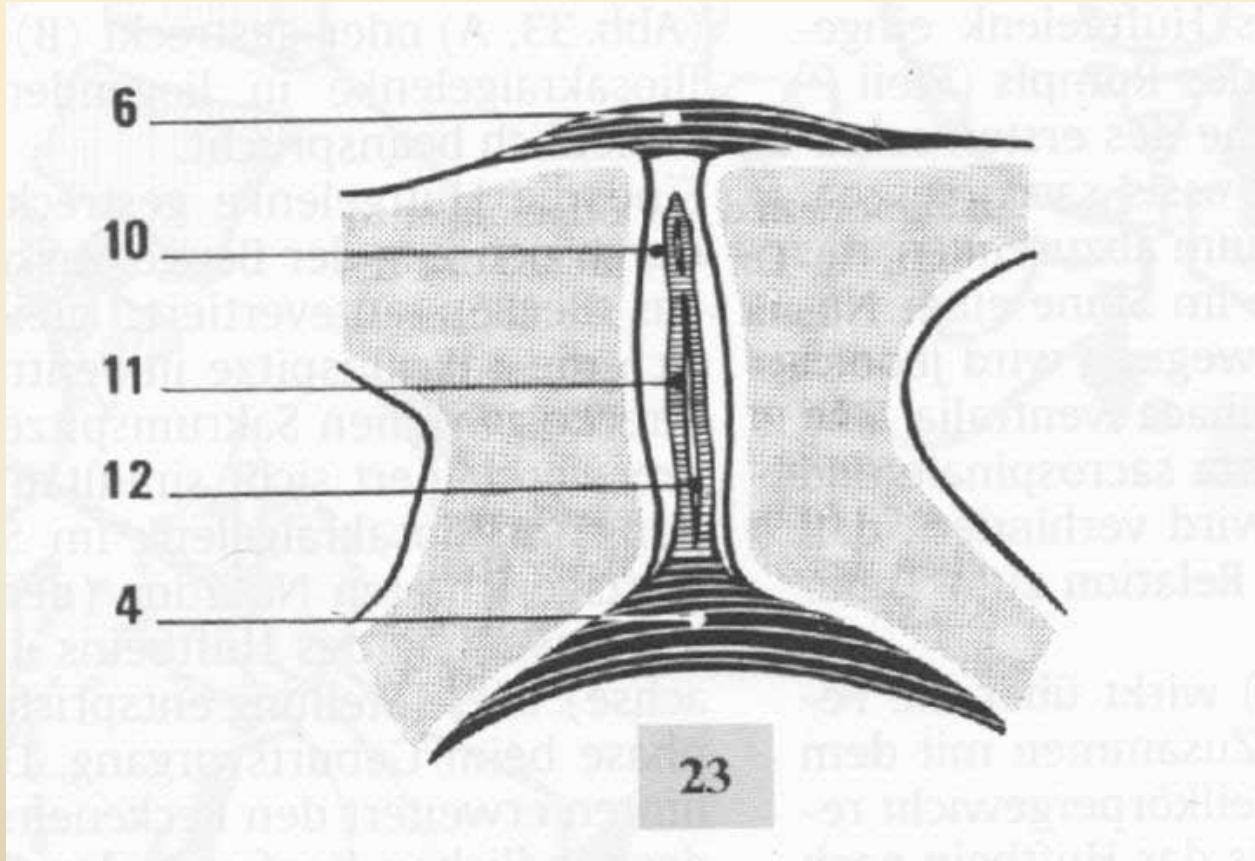
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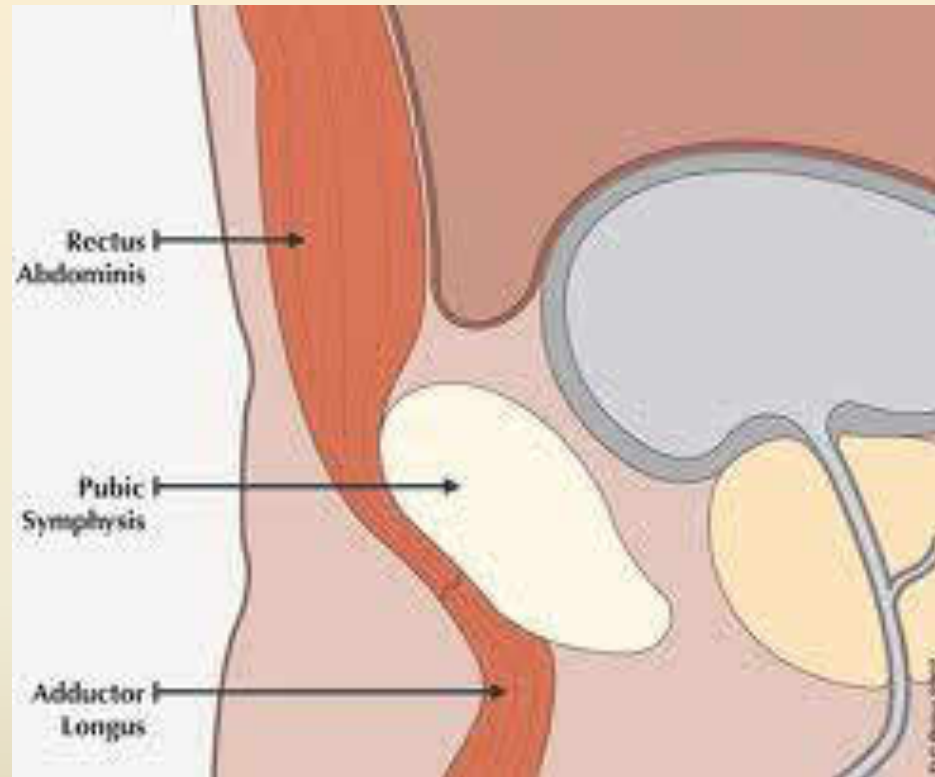
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Anatomie



Anatomie



Anatomie

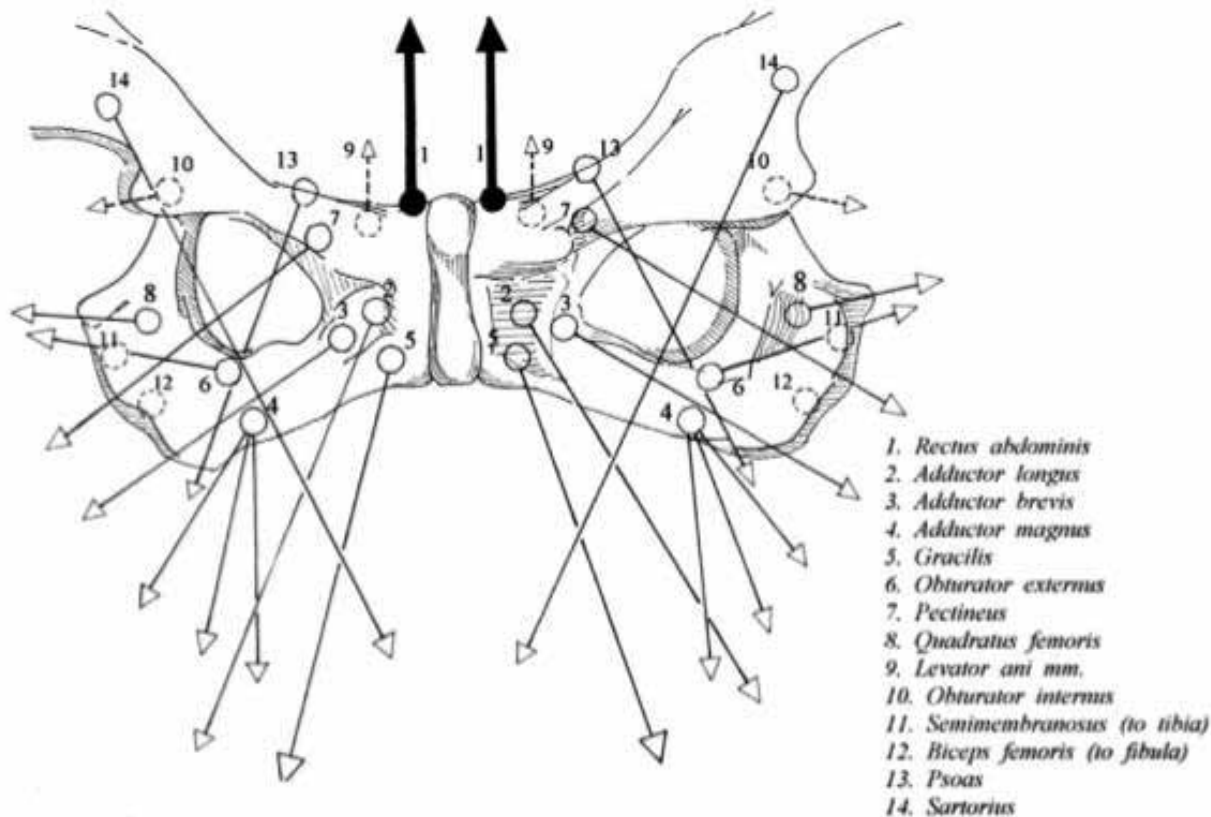


Figure 3 Bony skeleton and forces of the pubic joint. Note the pubic symphysis is at the center of the forces created by these muscles. Signs and symptoms distribute around this axis. For illustrative purposes, we list the location of signs in a recent series of 100 patients: left rectus abdominis, 72; right rectus abdominis, 68; left adductor longus, 43; right adductor longus, 37; left pectineus, 28; right pectineus, 24; pubic symphysis, 23; left adductor brevis, 16; right adductor brevis, 14; left psoas, 11; right psoas, 7; either sartorius, 9; either rectus femoris, 4; obturator externus, 3; adductor magnus, 1; gracilis, 1.

Differentialdiagnosen

1. Core muscle injuries
2. Hüftgelenkspathologien
3. Andere Diagnosen
 - Gastrointestinal
 - Urogenital
 - Gynäkologisch
 - Andere muskuloskelettale Pathologien (z.B.: LWS)
 - Nervenkompressionssyndrome (ilioinguinal, obturator)!!!
 - Tumoren, Entzündungen, Gefäßerkrankungen, etc.

Differentialdiagnosen

1. Core muscle injuries

2. Hüftgelenkspathologien

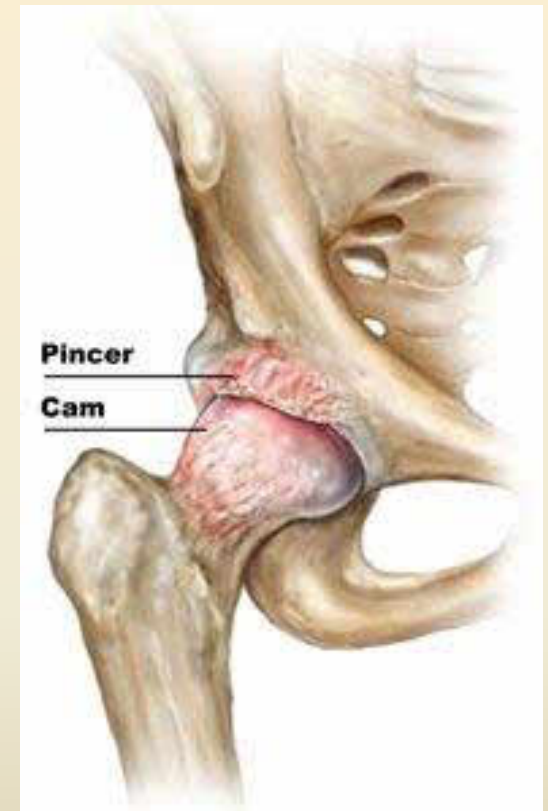
- FAI/Labrumopathologien!!!
- Osteitis pubis
- Iliopsoastendinopathie/snapping hip
- Tractus iliotibialis Syndrom

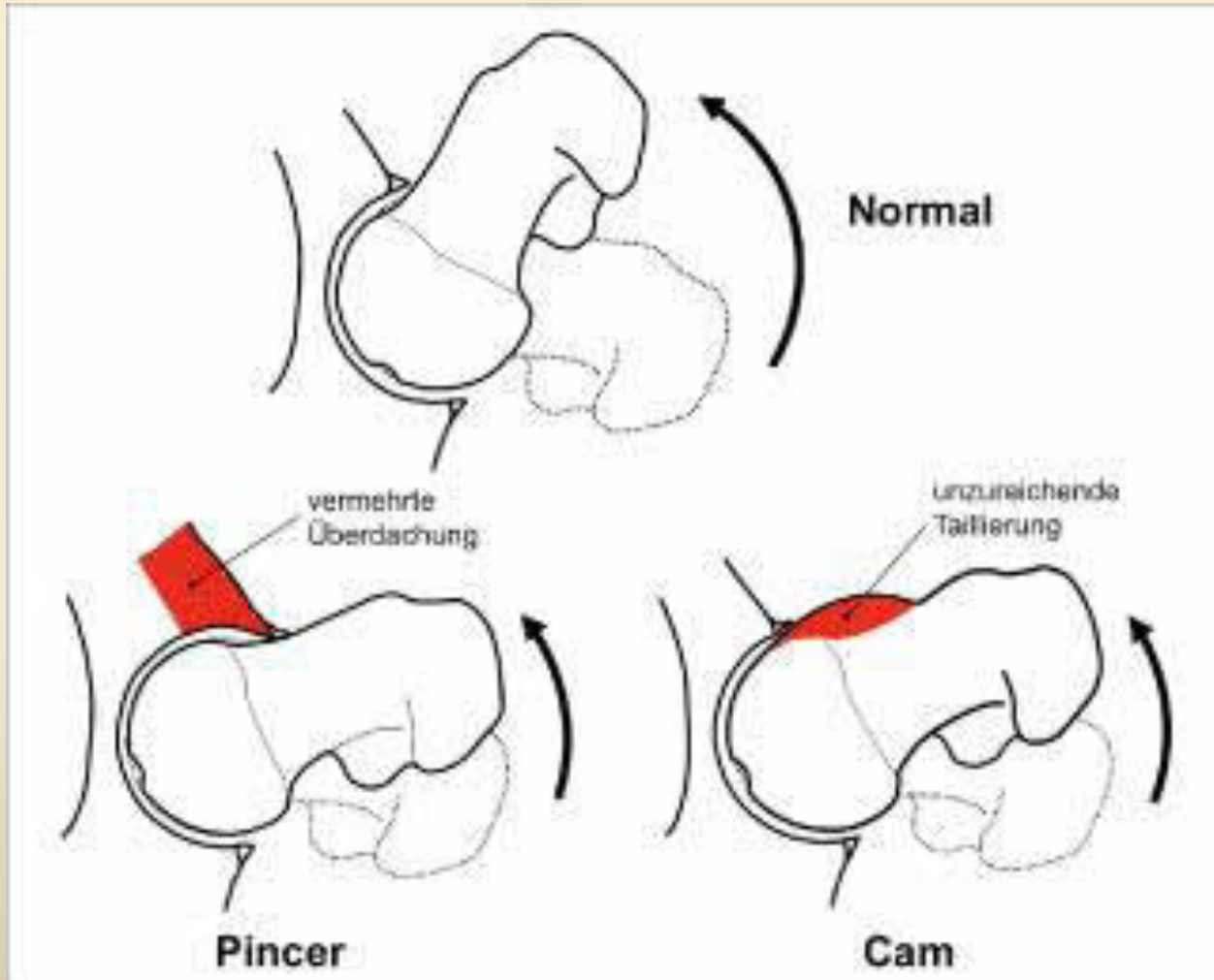
Cam-Impingement

Pincer-Impingement

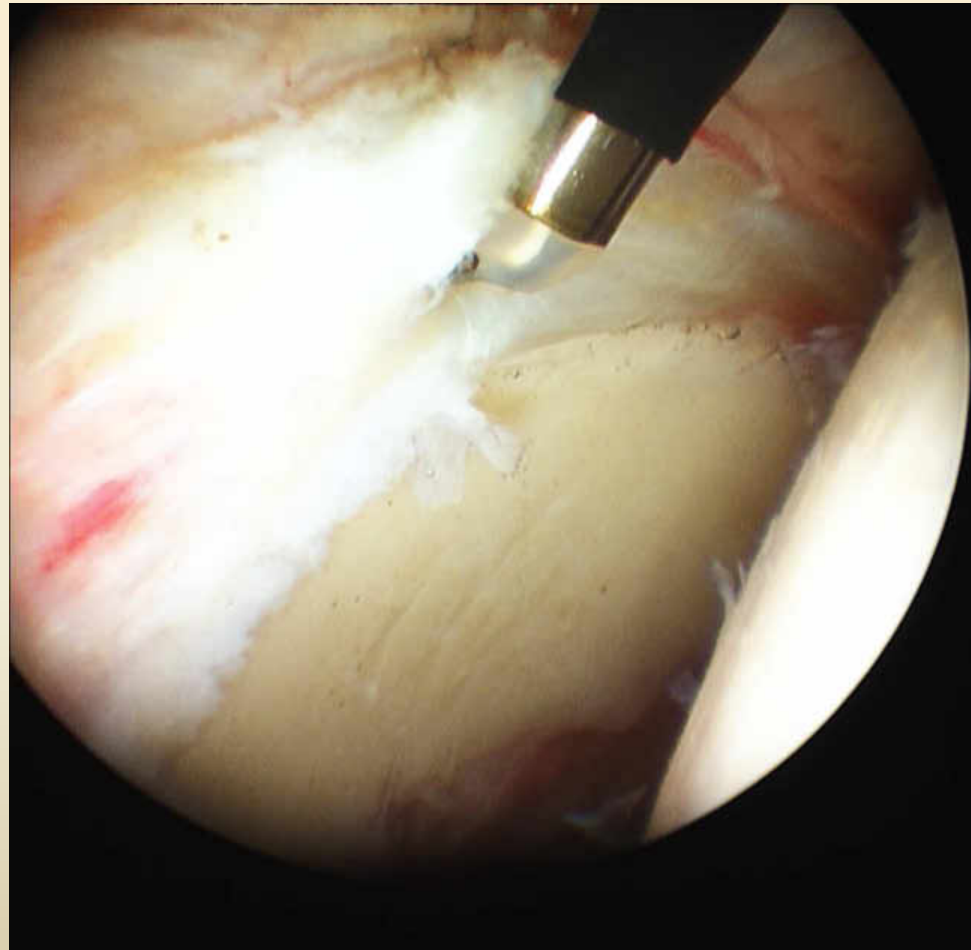
Kombinierte Form

Hypermobiles Gelenk

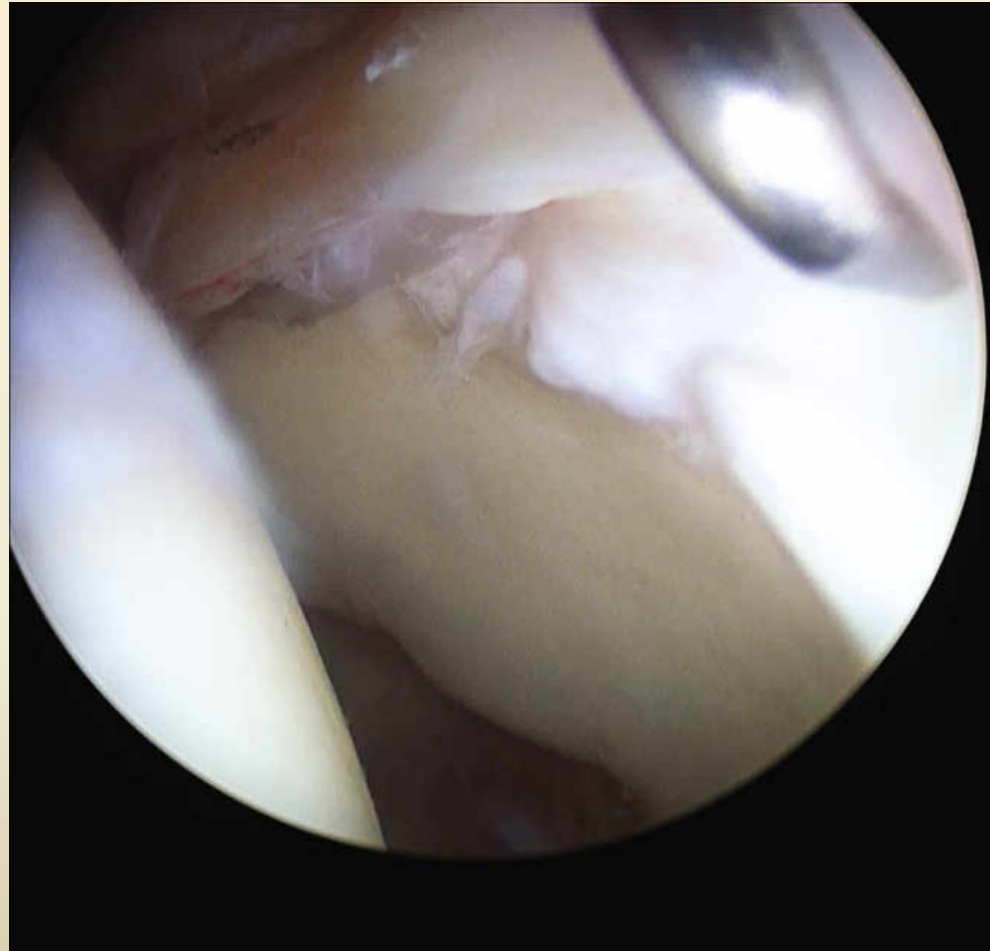




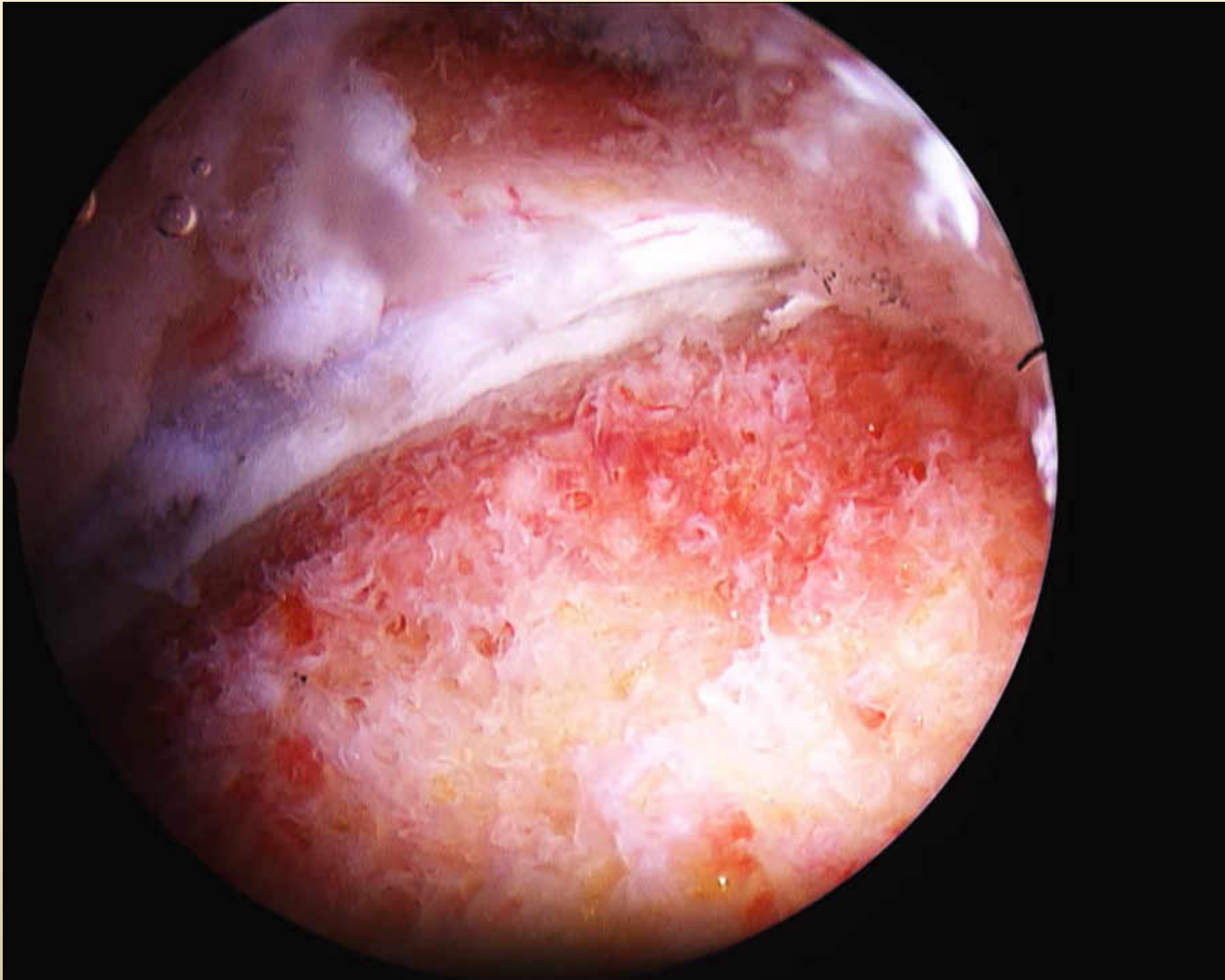
Labrumruptur



Labrumruptur



CAM-Resektion



High incidence of athletic pubalgia symptoms in professional athletes with symptomatic femoroacetabular impingement.

38 athletes, mean age 31, consecutive arthroscopic FAI surgery

- 32% prev. AP surgery (no return to previous level in isolated AP surgery)
- in 39% AP symptoms resolved with FAI surgery alone!
- 36 pt. (95%) returned to previous level
- all patients with combined surgery returned to previous level
- RTP av. 5,9 months, (3-9 months)

Osteitis pubis

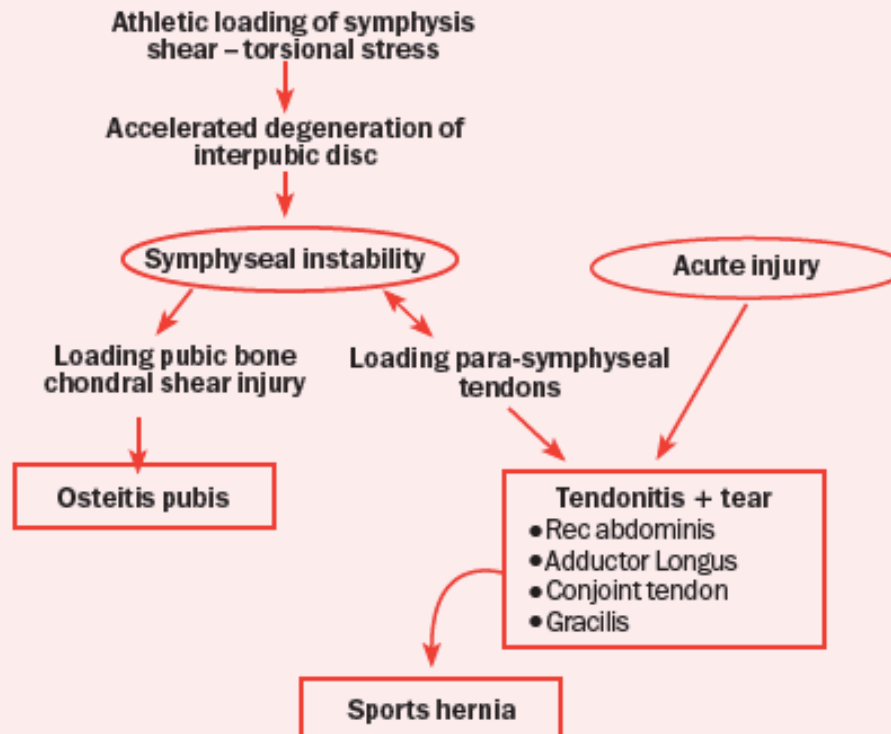
- schmerzhaftc Entzündung d. Symphyse und benachbarter Strukturen
- Männer zu Frauen 5:1
- Stop-and-go, Läufer
- Dg.:
 - DS
 - Rö (Flamingo-Aufnahme), Scan, MRT
- Th.:
 - NSAR, Inf., Physio (Core Training)
 - Curettage (ev. endoskop.)¹



Pathophysiologie

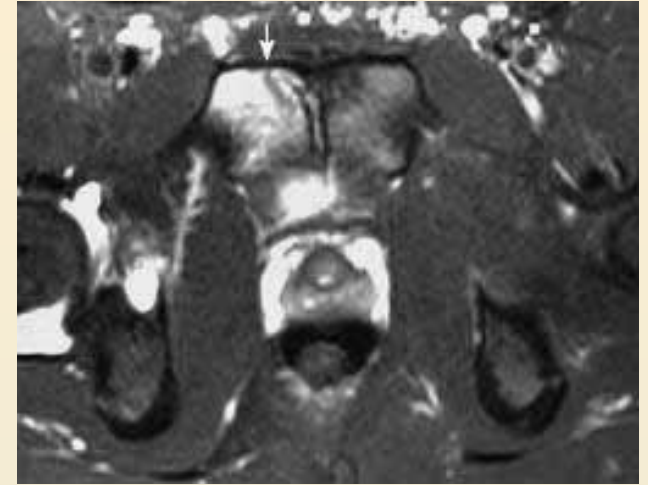
Figure 2: Suggested pathophysiology of sports hernia

Viewing the sportsman's hernia as a progression of injury from inflammation in the pubic joint to a hernia in the weakened muscles of the groin, enables all the theories to be true



Diagnostik

1. Anamnese
2. Klinische Untersuchung
3. MRT
4. Rö
5. Sono (Dynam.)
6. (CT)



Diagnostik

1. Anamnese:

- chron. Schmerzen Leiste/Unterbauch
- bei stärkerer Anstrengung (Sprint, Kicks)
- Besserung in Ruhe
- verschlimmert bei Niesen u. Husten
- Schmerz limitiert sportl. Leistungsfähigkeit
- Adduktorsymptomatik



Diagnostik

Klinische Untersuchung:

- Hernie ausschließen!
- DS med. Inguinalkanal, Rectus abd. Ansatz am Os pubis (80%)¹
- gel. tastbare Schwäche/Lücke über med. Leistenband/lat. Rectus (90%)¹
- Muskelfunktionstest Hüftflexoren, -adduktoren, -abduktoren
 - Schmerzen bei sit-up gg. Widerstand (64%)¹
 - Schmerzen bei Rotation gg. Widerstand (73%)¹
 - Schmerzen bei Adduction gg. Widerstand (57%)¹
- Hüftgelenk (Femoro-acetabuläres Impingement!!!!)
 - Impingementtest (FADIR), FABER, log roll,

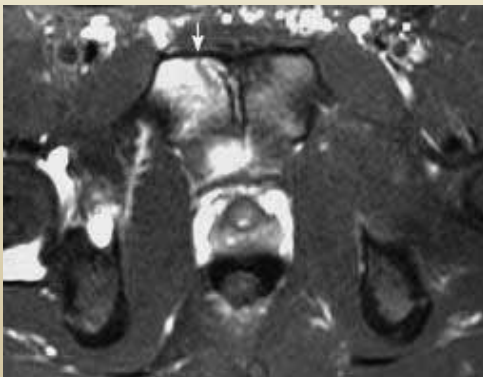
1) Brunt LM et al. AOSSM annual meeting 2007



Diagnostik

3. Bildgebung:

- Rö: BÜ, Hüfte axial, 45° Dunn view, ev. Faux profile, Flamingo view
- MRT:
 - nativ (ev. eingeneigte Schichten)
(sens.) 68%, spec. 100% for rectus¹
sens. 86%, spec. 89% for adductor¹
 - Arthro MRT (eingeneigte Schichten)
- CT(als DD): f. knöcherne Fragestellungen ev. 3D Rekonstruktion
(subspinal Impingement, Osteochondrome, etc.)



1) Zoga et al. Radiology 2008

Therapie

1. Konservativ:

- NSAR
- Kryo/Massagen
- Physiotherapie („core stability training“)
- Infiltrationen:
 - Corticosteroide
 - PRP



Therapie

2. Chirurgisch (6-8wks (6mo) kons. th. failed)

– 121 Kombinationen v. 26 Eingriffsarten¹
(repair/release) RTP 77-100% (Level IV)

– Adduktorenrelease/-refixation

– FAI/Labrum Chirurgie



Take home

- Symptomenkomplex – keine Hernie!
- viele Differentialdiagnosen
- genaue Anamnese/Untersuchung
(Hüftgelenk/FAI)

DANKE!



**5. UPDATE
HÜFTARTHROSKOPIE**

WIEN
9. & 10. MAI 2014

**SAVE
THE
DATE**

- ➔ WORKSHOP
- ➔ INTERNATIONALE
VORTRAGENDE

 Österreichische
Gesellschaft für
Hüftarthroskopie www.asha.at

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