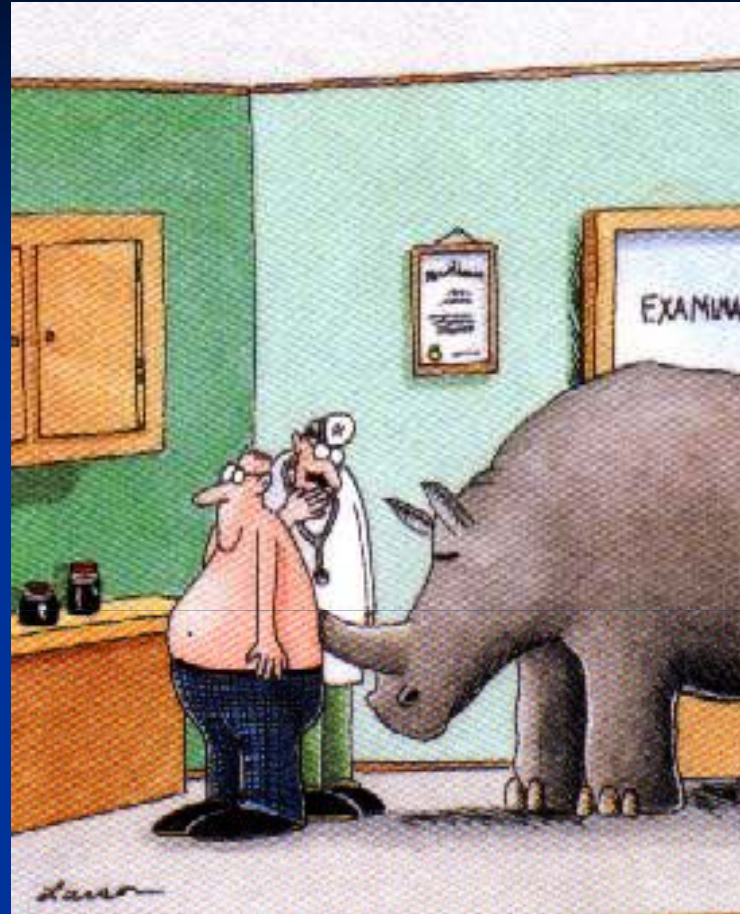


Hip and Groin Pain in the Young Athlete

Dave Cloke
MFSEM(UK)

- Think outside the box!



Well well, maybe it's not renal stones after
all....

- Think outside the box!
- Controversial subjects
- Poorly understood pathology
 - Tendinitis/opathy
- Why??
 - Look for cause – intrinsic or extrinsic
- Concept of neural tension
- Rehab
 - RICE
 - Stretching & ROM
 - Strengthening & coordination
 - Progressive return to activities
- Often controversial or limited role for surgery

Overview

- Clinical Approach
 - Hx
 - Examination
 - Ix
- Differential Diagnoses
 - Musculotendinous problems
 - Bursitides and others
 - Hip joint problems
 - Herniae

Reference

Clinical Sports Medicine
2nd Ed; Bruckner & Khan

History

- Pain
 - Onset
 - Location
 - Timing
 - Exacerbating movements
 - Other sites of pain

Examination

- Not just the hip joint!
- Muscle groups
 - Tenderness
 - Active, resisted and passive movement
- Spine, SIJ, abdomen & herniae
- Gait and leg length

Particular examination points

- Palpation
 - Adductors, symphysis, rectus abdominus, psoas
- Active movement
 - Squeeze test for adductors
- Passive movement
 - Quadrant test
 - Adductor, quads and psoas stretch
- Resisted movement
 - Adductors, flexors, abdo flexion, psoas
- Function
 - Hopping, sit up, running, zig zag
- Special tests
 - Spine, SIJ, FABER, Trendelenburg, neural, herniae

Investigations

- Plain XR
 - Stress #, osteitis pubis, OA, deformities, old disease
- Bone scan
 - Osteitis pubis, stress #
- US
 - Tendon pathology
- MRI
 - Sensitive – stress # etc
 - Arthrogram (intraarticular pathology)

Differentials

- Common
 - Musculotendinous injury, Referred pain, Obturator nerve entrapment
- Less common
 - Herniae, intraarticular, Apophysitides, snapping hip
- Not to be missed
 - Tumour, stress #, SUFE, abdominal, Perthes, arthritides

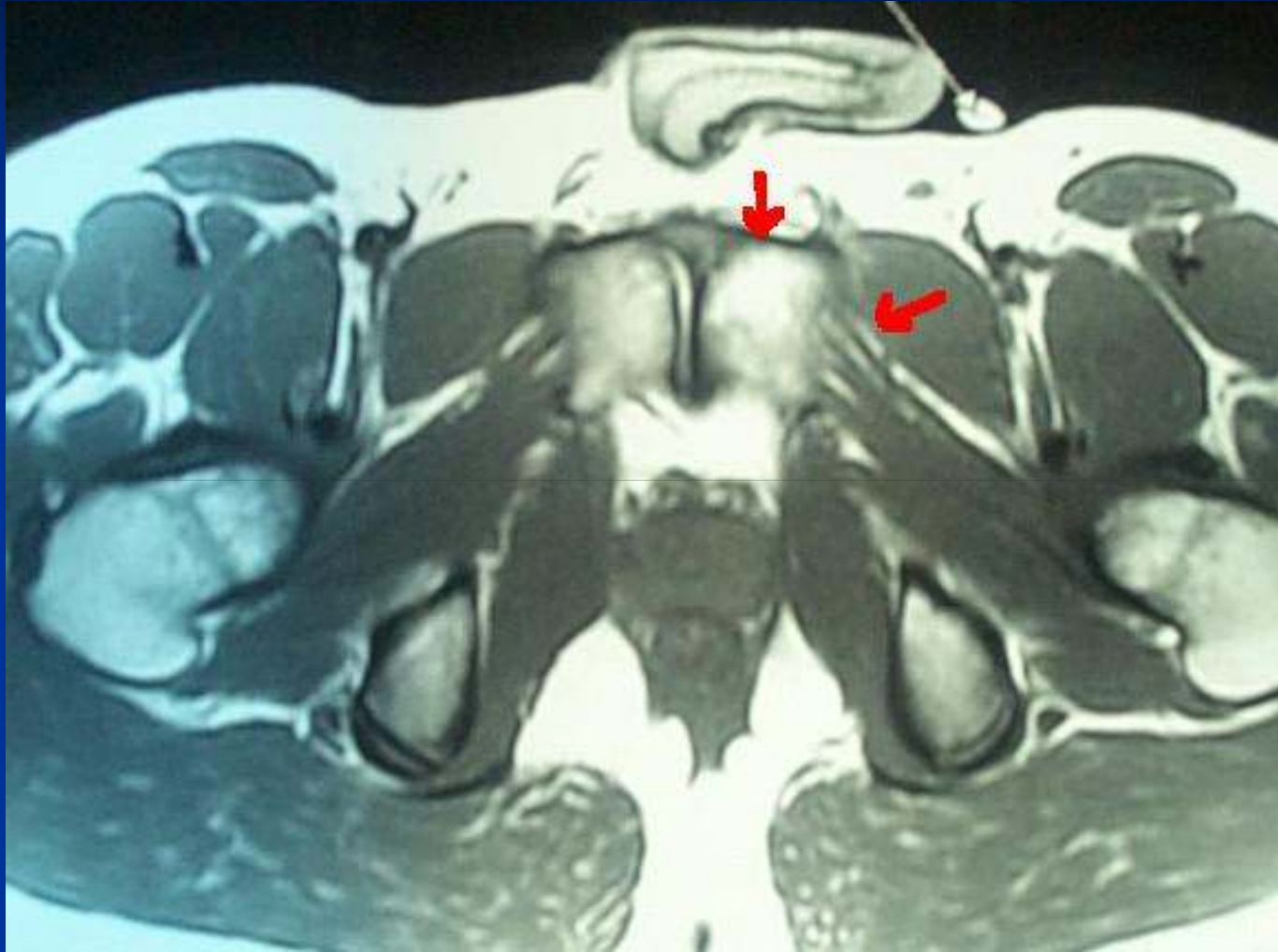
Adductor injuries

- Sudden change in direction
- Acute; localised, pain on stretch / resistance
- RICE, stretching, progressive strengthening and rehab
- Recurrent injury
 - Inadequate rehab
 - Underlying biomechanical problem?
- Tendinopathy

Osteitis pubis

- Poorly understood pathology
 - ? Shear stress, insertional tenopathy
- Pubic bone & symphysis
- Insidious onset
- Groin pain on twisting
- Tenderness, squeeze test
- XR changes, bone scan hot, oedema on MR
- NSAIDS, rest, stretches, core stability
- Progressive rehab
- (Surgery)



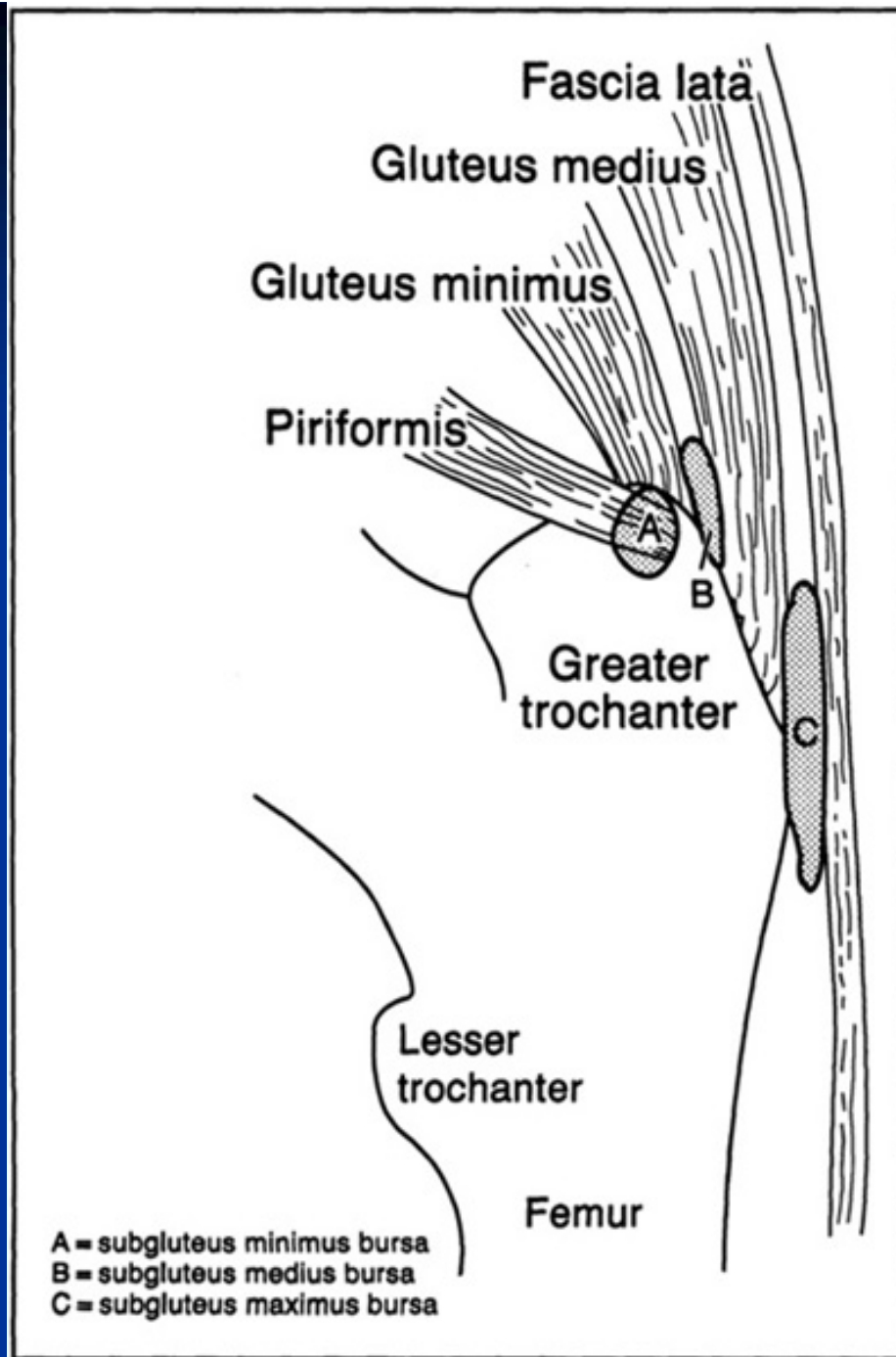


Obturator neuropathy

- Related to adductor tenopathy
- Exercise related pain in adductors
- Pain on passive stretch
- Weakness when symptomatic
- Tenderness
- Rehab
- Surgical release

Trochanteric bursitis

- Distance runners
- Tip of GT
- Group of bursae



Trochanteric bursitis

- Distance runners
- Tip of GT
- Group of bursae
- May be added tenopathy
- Tight ITB, LLD
- Rest, NSAIDS, stretches, pelvic control
- Footwear

Intraarticular pathology

- Groin pain
- Consider paediatric problems
- No pain on resisted movements
- Pain on quadrant test
- XR, MR arthrogram

Labral injury

- Twisting injury
- Quadrant test
- Relationship to femoroacetabular impingement
- Chronic
 - ? Articular degeneration
- Arthroscopy

Stress fracture

- Groin pain
- Why?
 - Overuse injury
 - Balance of injury and repair
 - Muscular fatigue
 - Females (Female athlete triad)
- Bone scan, MR, XR
- Compression
 - More benign
 - Rest & rehab
- Tension
 - Possibility of completion



Herniae

- Controversies
- Confusing terminology
- True hernia
- Posterior inguinal wall weakness
- “Gilmore’s groin”
 - Ext oblique tear, conjoint tendon tear
- Surgery often advocated
- Many probably in osteitis pubis group

Nerve entrapments

- Ilioinguinal
 - Groin pain
- Genitofemoral
- Lateral cutaneous
 - Injection, exploration

Misc

- Pubic ramus stress #
 - ? Cause
- Snapping hip
 - Lateral – ITB
 - Stretching, stability
 - Psoas tendon
 - Stretching
- Iliopsoas
 - Overuse or bursitis
 - Stretch & resistance pain
 - ? Neural element / spinal problem
- Rectus abdominis tendinopathy
 - Pubic pain on sit up

Adolescents

- SUFE
- Epiphyseal injury
- Avulsion fractures & apophysitis
 - AIIS
 - Ischial tuberosity
 - Prolonged rehab

Referred pain

- SIJ
- Lumbar spine
- Femoral stretch
- Intraabdominal pathology

Summary

- Think outside the hip
- Exclude serious pathology & referred pain
- Be aware of musculotendinous conditions, and their management
- Look for manageable causes

Questions?

