

Problems after hip arthroscopy

Mr. Parag Kumar Jaiswal

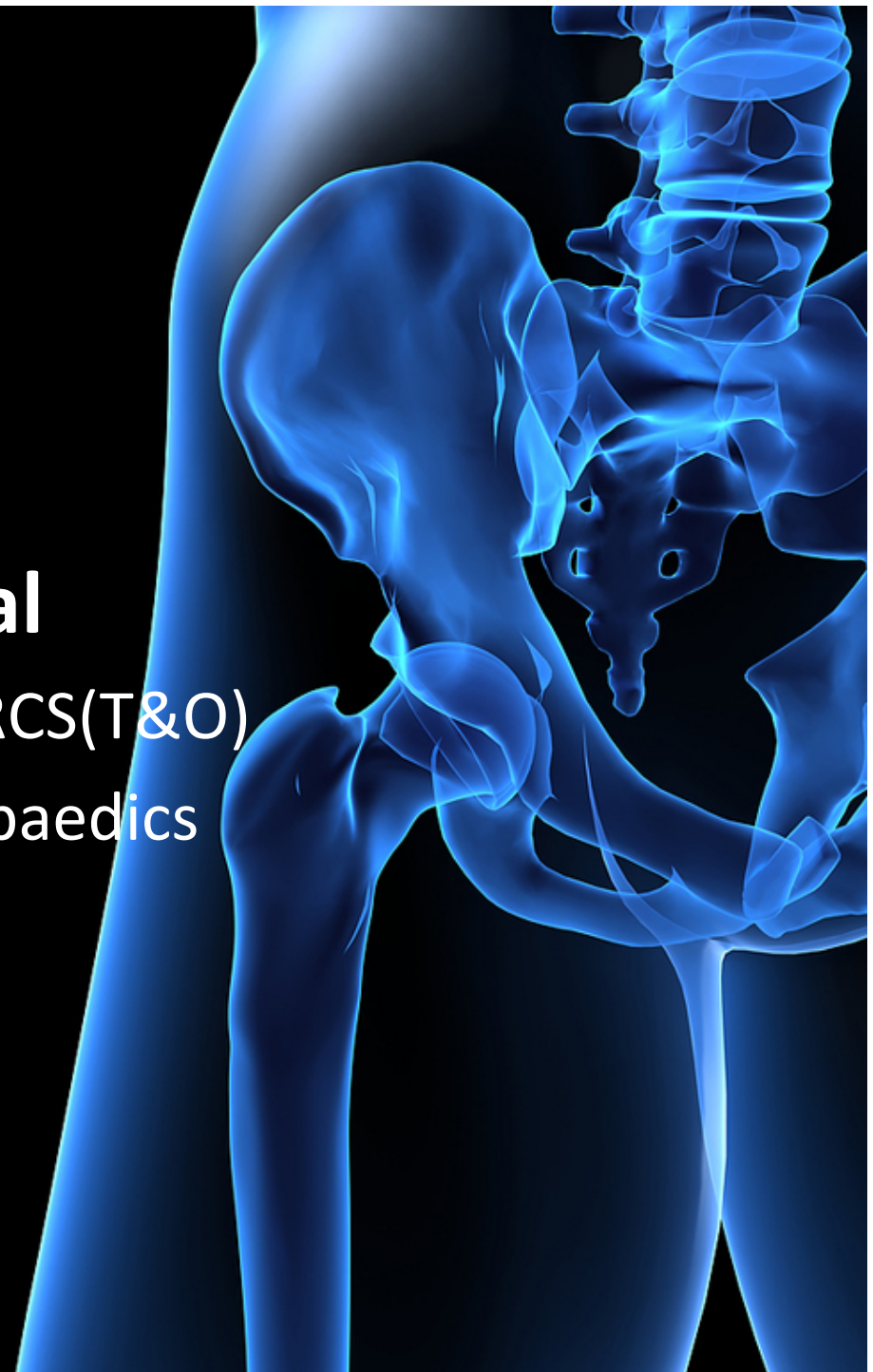
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Who Am I?

- 2007 – Academic Clinical Fellow/Trainee Stanmore Rotation
- 2007- 14 – Thesis on cartilage injury in knees – prizes & publications
- 2014 -15 – Joint Reconstruction and Sports injuries in Calgary, Canada
- 2015 – 16 - Hip Fellow, Frimley Park Hospital
- 2016 – 18 - Locum Consultant Guy's Hospital
- 2018 - Travelling Fellowship, Philippon-Steadman Clinic, Vail, Colorado
- 2019 - Hip & Knee Surgeon with special interest in Young Adult Hip Disorders and Sports Injuries



The physiotherapist said my recovery was remarkable but I am confident it is because Mr Jaiswal did a superb job leaving me the easy part of getting on my feet. I plan to return to tennis now. Whilst I can only give my personal experience I happily recommend Mr Jaiswal and consider myself fortunate to have had his services.

Recommend



Trust



Royal Free London NHS Foundation Trust

world class expertise  local care



recommend him highly enough.

After nearly two years of struggling to find a diagnosis for my pain at a different hospital, I was finally referred to Mr Jaiswal at Guys, who very quickly organised a range of scans, found a diagnosis and arranged hip arthroscopy and labral repair. 3 months later and I already have a significant improvement in the movement in my hip and the pain has drastically reduced.



Overall (5/5)



Explanation (5/5)



Bedside Manner (5/5)

Patient seen for:

[Hip Arthroscopy](#)

[Hip Impingement](#)

[Labral Tear](#)

Dr Jaiswal has performed surgery on both my hips (R March 2020, L December 2020). Both hips required bone shaving and labral repair. It was a long journey for me to be properly diagnosed due to the scans being unclear. Dr Jaiswal used his clinical judgment to determine that surgery was required and was able to adapt to what he found during the surgery. My quality of life is significantly improved following the surgeries. Where I have had questions after the surgery Dr Jaiswal has been really responsive and considered.

[Read less](#)



Overall (5/5)



Explanation (5/5)



Bedside Manner (5/5)

Patient seen for:

[Hip Impingement](#)

[Labral Tear](#)

An expert in his field, Dr Jaiswal is extremely knowledgeable but most of all he is kind. As a young woman of colour, it has been particularly difficult to access treatment for my hip pain. I spoke with three orthopaedic surgeons at leading hospitals on the NHS and none were very sympathetic or willing to operate despite the excruciating pain I was in. Dr Jaiswal was the first consultant who took my pain seriously. There is no doubt he is extremely capable as proven by the many contributions he has made in his field, but one thing that must not be underestimated is the true kindness and genuine care he has for his patients' wellbeing. It is a huge decision to have hip surgery in your 20s, even more so during a pandemic, so it was extremely important that I find a consultant who took the time to listen and make sure I understood my diagnosis and the procedure. My family were unable to attend my consultations or the hospital on the day of my arthroscopy due to covid. Nonetheless, Dr Jaiswal called to talk them through the procedure beforehand and even called after my surgery! Dr Jaiswal is extremely passionate about the work he does and truly cares for his patients. I'm very grateful to have been treated by him and recommend him highly. He takes the time to listen and will talk you through a treatment plan which works for you whatever your financial circumstances.

[Read less](#)

Aims/Objectives

- Pitfalls during the 5 stages of rehabilitation
- Overview of common causes of refractory pain after hip arthroscopy
 1. Management of iliopsoas pathology
 2. Management of arthrofibrosis



Introduction

- Hip arthroscopy is being increasingly used
- 727% increase since 2002 in the UK
- A wide variation in rehabilitation protocols
 - Surgeon dependent
 - Surgery dependent
 - Physiotherapy dependent



Stage 1 – Initial phase (Week 1-3)

Improving range of movement

- Reduce pain and swelling.
- Normalise walking pattern depending on weight bearing status.
- Improve hip muscle strength and core strength.
- Improve hip movement hip, including rotation.
- Improve balance.



Stage 2 – Intermediate phase (Week 3-5)

Strengthening

- Improve muscle strength by functional exercise – Step ups/down, static bike etc.
- Improve core strength
- Improve balance – double leg to single leg.
- Maintain cardiovascular fitness – Swimming – no breast stroke, static bike, walking on treadmill (if walking pattern normalised).
- Improve movement.
- Complete hydrotherapy; if appropriate.



Stage 3 – Advanced Phase (5-12 weeks)

Stamina

- Improve muscle endurance
- Full hip ROM with stable pelvis
- Good core control and stability
- Improve Cardiovascular fitness
- Begin plyometric work
 - Fast change of direction exercises useful for sport



Stage 4 – Sports specific rehab (Week 12-16)

Designed for people who want to return to competitive sport.

- Gradually return to maximal effort
- Challenge balance.
- Complete full impact activities.
- Begin sport training before returning to full competition.
- Eliminate asymmetries in activities such as running.



Stage 5 – Sports specific rehab (Week 16+)

Return to full activity/sport

- Functional power assessment
 - E.g. single-leg vertical jump and hop
 - 90% of uninvolved leg needed to progress
- Timelines vary
- Microfracture typically delayed until 4-6 months
- Psoas tendon release for snapping delay til 9 months



Common causes for refractory pain after hip arthroscopy

- Residual impingement +/- labral re-tear
- Over resection
- Chondral lesions
- Labral calcification
- Heterotopic calcification
- Synovitis
- Trochanteric bursitis
- Instability
- Iliopsoas pathology
- Adhesions



Iliopsoas (IP) Tendon

- Comprises of iliacus and psoas muscles
 - Tendon may have 1,2, or 3 tendinous components
 - Philippon demonstrated double or triple-banded tendons more common than single
- Runs anterior to hip capsule
- Major hip flexor
- Course of tendon can be altered after FAI surgery
- Implicated in development of atypical labral tears



Iliopsoas tendonitis after hip arthroscopy

- Partial or non-weight bearing protocols may result in over activation of IP tendon
- Altered gait and pre-op gait mechanics usually result atrophy of muscles around hip
 - Prone to tendon overuse
- Pre-hab, Pre-hab, Pre-hab
- Symptoms may be similar to FAI and labral pathology



Signs and symptoms

Anterior groin pain

1. Stinchfield test (supine resisted SLR)
2. Psoas stretch test (Ludloff test)
 - Pain with resisted hip flexion in seated position
3. Impingement and FABER usually negative

Other indicative symptoms:

- Progressively decreasing stride while walking
- Manually shifting operative leg to stand from a seated position



Treatment

Activity modification

- Alter physiotherapy program to include physical therapy
- Cessation of hip flexor strengthening
- Foam rolling
- Psoas stretching
- Assistive device as tolerated

Approx 50% get significantly better

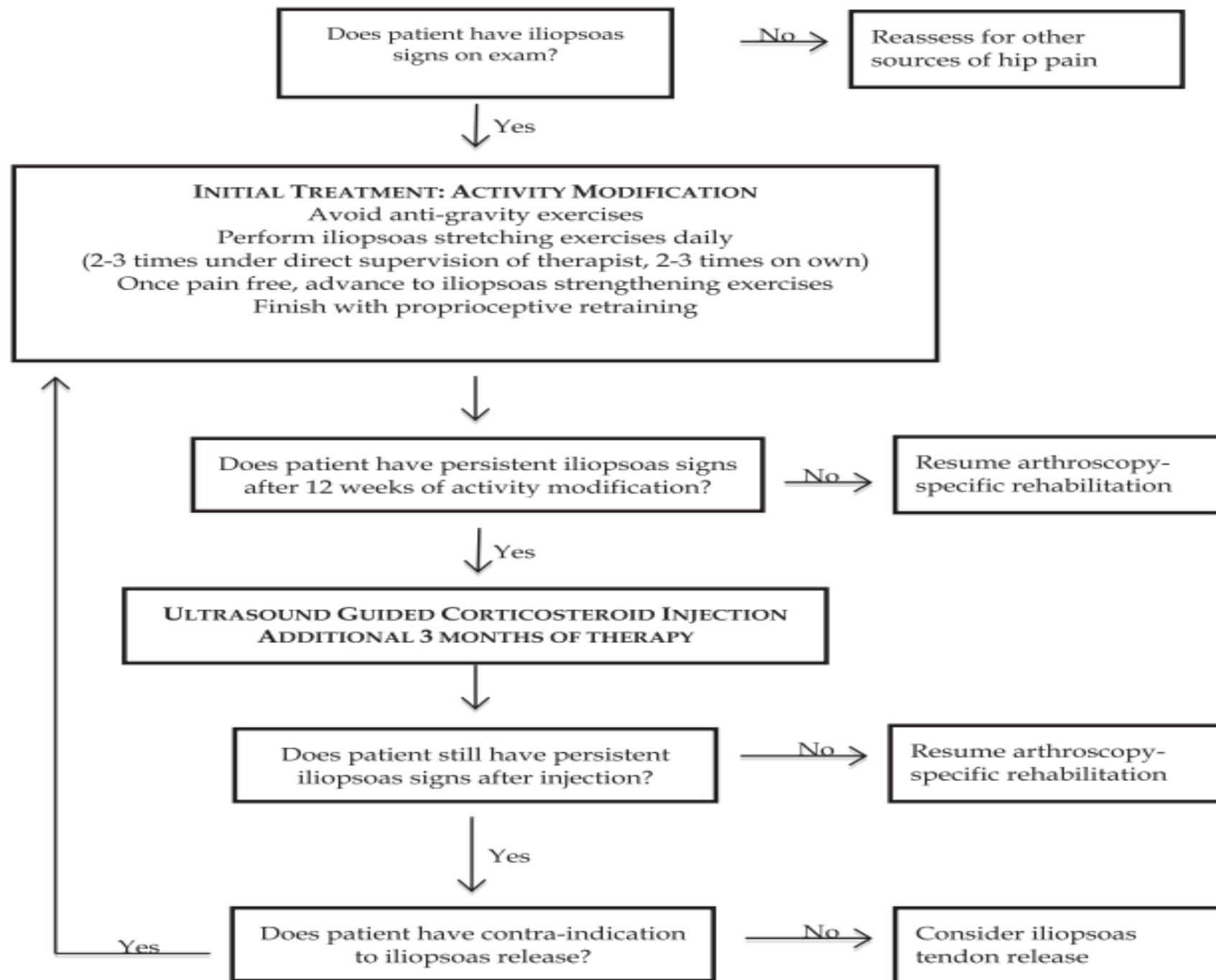


Image guided injection

- US can confirm diagnosis and facilitate
 - 40mg kenalog + 2ml of 1%lignocaine
- I.I. used in theatre with dye (under sedation)
 - Allows passive ROM and stretching
 - But cannot confirm diagnosis

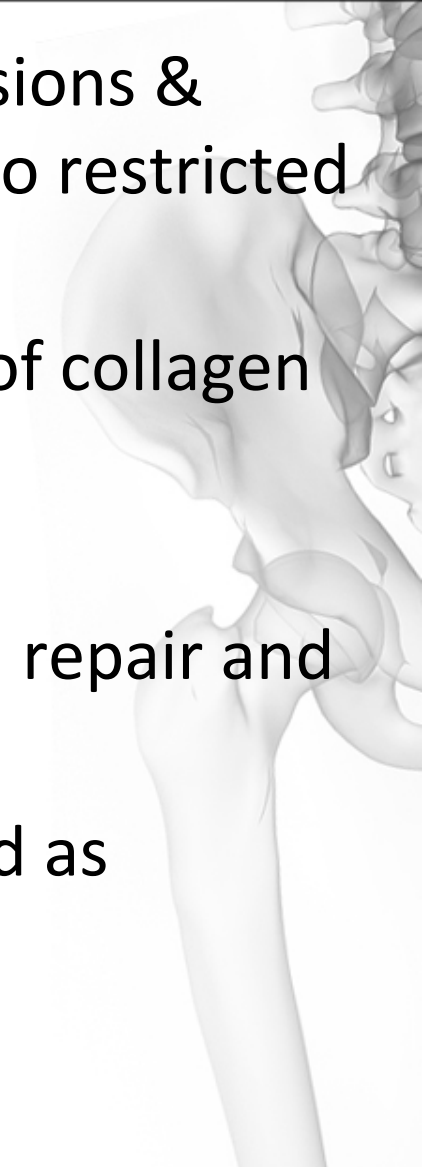


PERSISTENT HIP PAIN 6 WEEKS AFTER ARTHROSCOPY



Arthrofibrosis after Hip Arthroscopy

- Fibrotic joint disorder characterized by adhesions & excessive collagen production that can lead to restricted range of motion and pain
- Histology: extracellular matrix components of collagen and fibronectin
- Most commonly occur at site of neck osteochondroplasty or between site of labral repair and capsule
- Heterotopic ossification needs to be excluded as differential
- **MUST EXCLUDE OTHER CAUSES**



Signs & Symptoms

- Patients usually do well for 3 to 6 months
 - Insidious onset
- Restricted ROM and pain
- FABER distance test (compare to other side)
- Impingement (inc posterior impingement test)
- Hip dial test



Biological Treatment

- TGF- β 1
 - Decorin, relaxin and suramin
- PDGF
- FGF
- Renin-angiotensin-aldosterone pathway
 - Losartan



Intra-articular adhesions – Risk Factor analysis – Willimon et al 2014

- Age < 30
 - OR = 5.9
- Microfracture procedure
 - OR = 3.1 less likely
- Did not receive circumduction therapy
 - OR = 4.1



Treating Stiffness and Arthrofibrosis After Hip Arthroscopy

**Rui Soares¹, BS, Justin W. Arner¹, MD, Joseph Ruzbarsky¹, MD, Lauren Pierpoint¹, PhD,
Parag K Jaiswal², FRCS(T&O), MD(Res), Marc J. Philippon¹, MD**

- 1) Steadman Philippon Research Institute, Vail, Colorado, USA; Steadman Clinic
and United States Coalition for the Prevention of Illness and Injury in Sport,
Vail, Colorado, USA**
- 2) Royal Free London NHS Trust, Department of Orthopaedics, Pond Street,
London, UK**



Prevention is better than the cure!

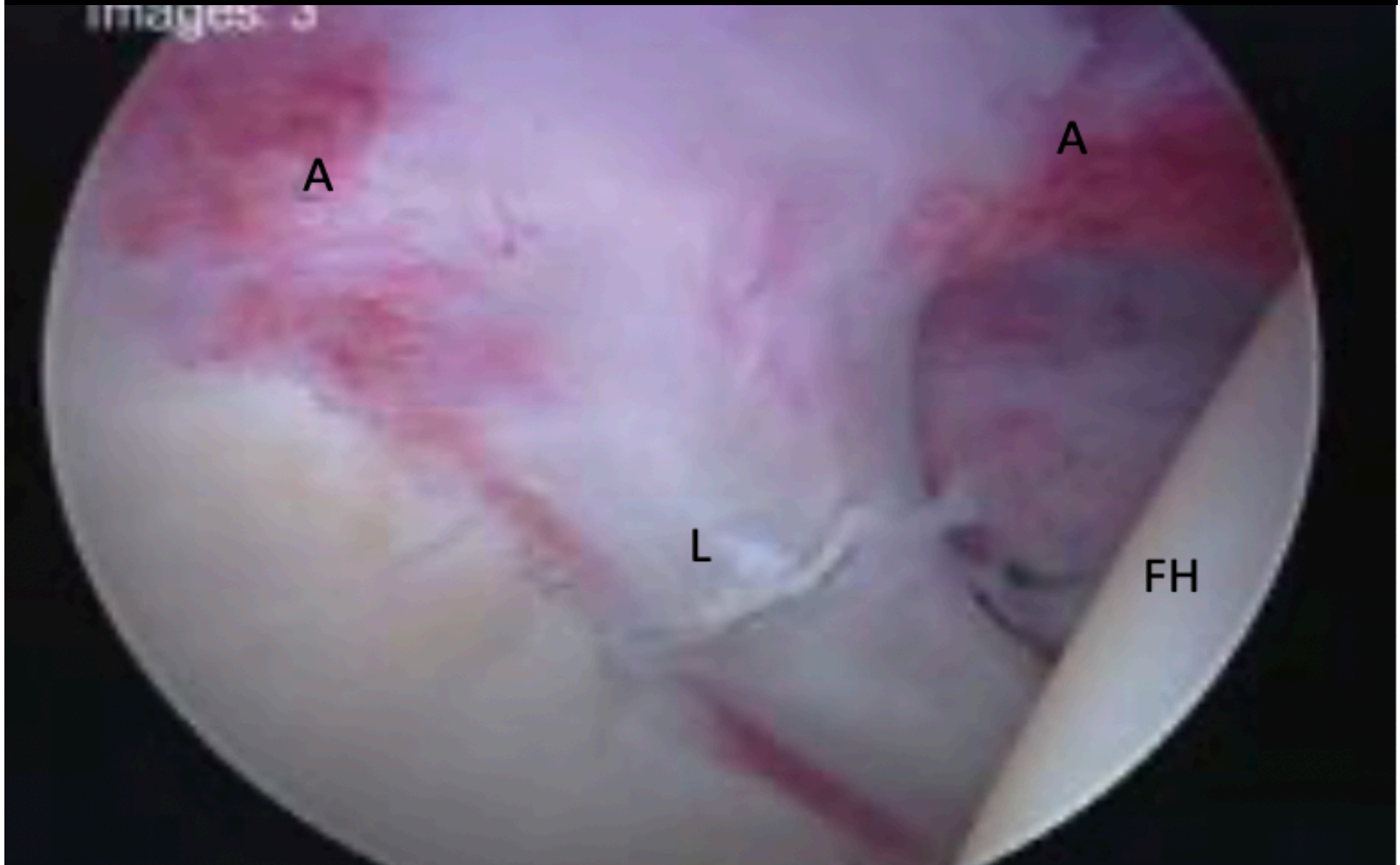
- Microfracture if indicated
- Preservation of chondrolabral junction if possible
- Knotless anchors
- Postoperative medications
 - Losartan
 - Naproxen
- Prehab
- Therapy techniques (circumduction)

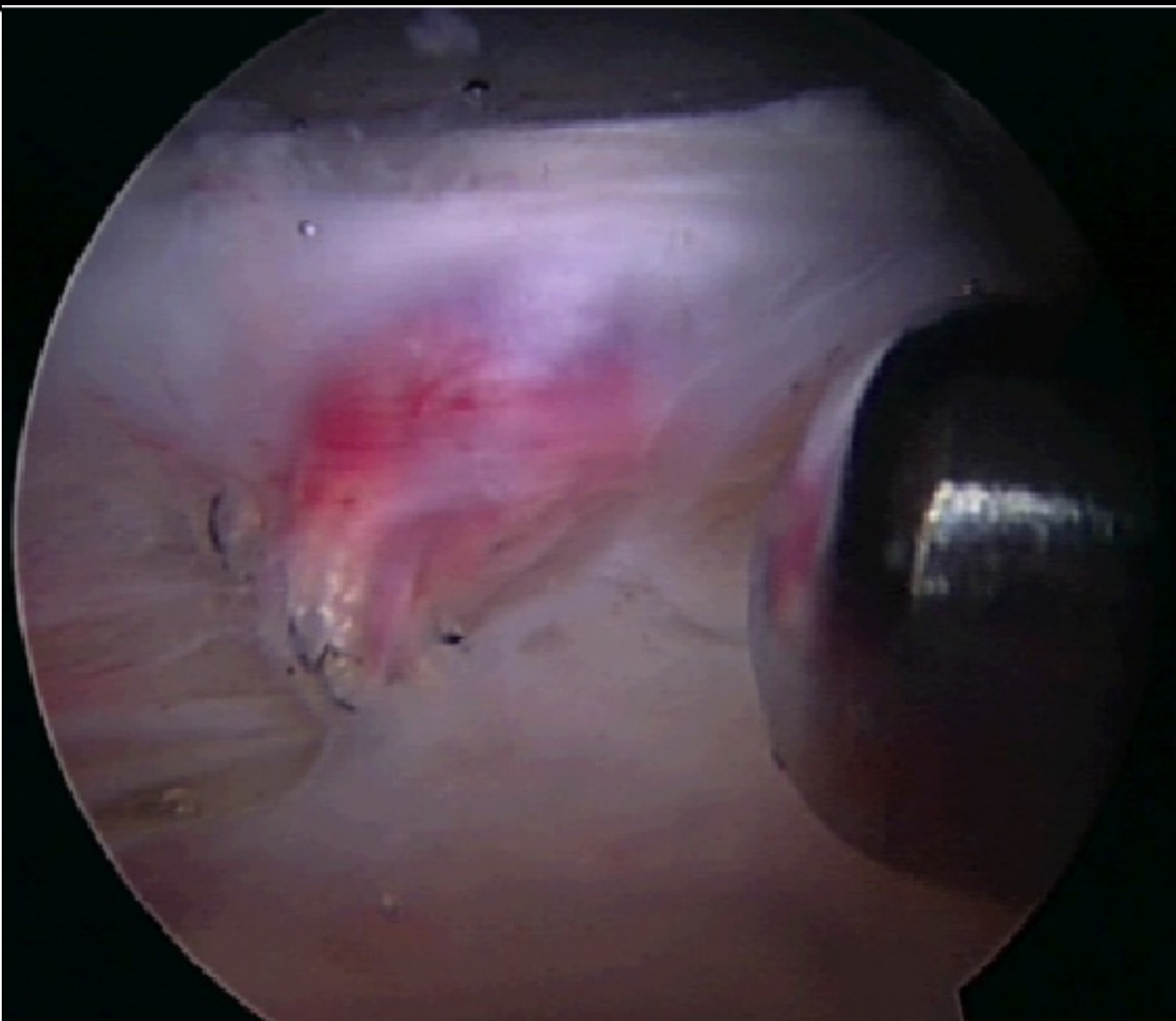


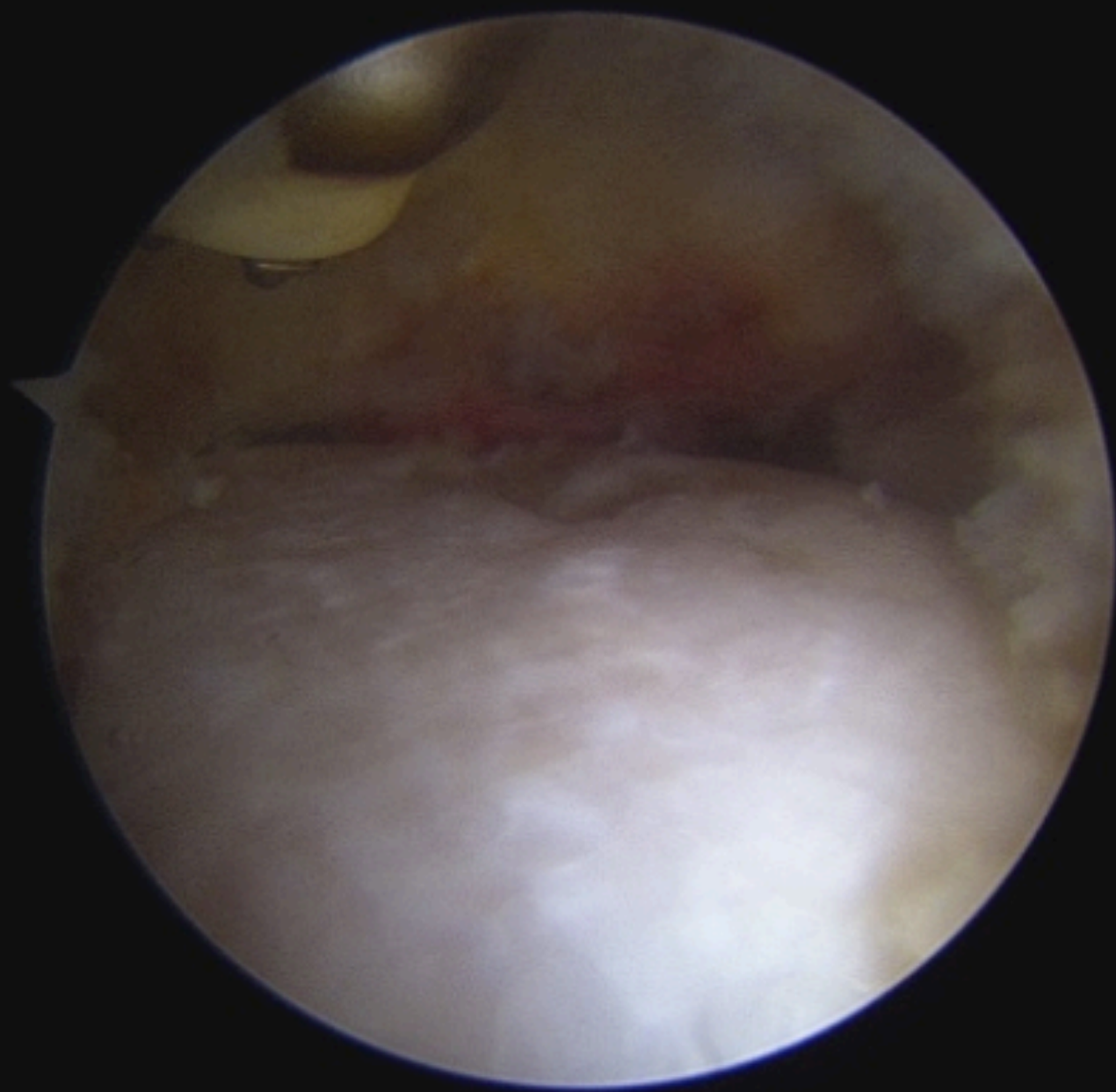
Circumduction: 20mins tds



A; adhesion formation around the L; labrum and AC;
Acetabulum during a revision surgery. FH; Femoral Head







Surgical technique in revision surgery

- Determine extent of labral tethering to capsule
- Hypoplastic or deficient labrum
- After lysis: insertion of ITB allograft spacer in capsulolabral recess
- Labral reattachment vs. augmentation vs. reconstruction



Summary

- There are a number of different causes for refractory pain after hip arthroscopy
- Important to monitor patients progress
- Not be fixated on time frames
 - Criteria-based assessment and progress
- Regular dialogue with Surgeon important
 - Discuss intraoperative findings and procedure carried out



Young Adult Hip Clinic - London

Delay in assessing and treating young adults could mean joint preservation surgery may not be possible

Friday Morning Royal Free Hospital





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The Royal Free Hospital

- Elective: Friday am
- Fracture: Tues am
- PPU: Tues pm & Ad Hoc

25 Harley Street

- Friday pm
- Ad hoc

St. John & St. Elizabeth Hospital

- Tuesday pm
- Thursday am

Highgate Private Hospital

- Tuesday evening
- Wednesday am