Treatment Options for Mild Hip OA

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Disclosures

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Definitions – What is "mild"?

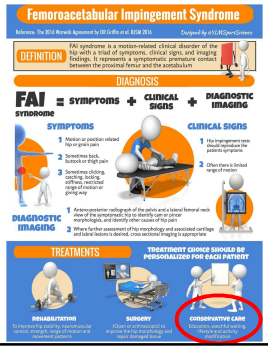
- Joint space width
  - Medial, middle, lateral sourcil
  - ***> 2.0 – 2.5 mm***
- Tonnis classification
  - ***0, 1***, 2, 3
- Kellgren-Lawrence
  - ***0, 1, 2***, 3, 4
- Subchondral cyst presence (Kumar MRI)
  - ***No***, yes

Treatment Options

Do not change morphology
Do not heal labrum
Do not reverse arthritis

Treatment Options

- Education !!!
- Education !!!
- Education !!!



Physical Therapy

Personalised Hip Therapy: development of a non-operative protocol to treat femoroacetabular impingement syndrome in the FASHIoN randomised controlled trial

Peter DH Wall,[1] Edward J Dickenson,[1] David Robinson,[2] Ivor Hughes,[3] Alba Realpe,[1] Rachel Hobson,[1] Damian R Griffin,[4] Nadine E Foster[5]

- Patient education
  - Avoid provocation – deep flexion/rotation
  - Encourage exercise, strength within pain-free ROM
  - Treatment of co-existent problems – back, knee, etc
  - Medical management – NSAIDs, Tylenol, no opioids

Physical Therapy - PEARLS

- Ask the patient – what "exactly" did you do in PT?
  - Red flags: massage, manipulation, no education, deep flexion/rotation stretching, forced IR stretches
- Talk to the patient – "but my labrum is torn"….
  - Encourage initial non-surgical measures
  - Discuss arthritis progression
- Listen to the patient – frustrated…
  - See multiple providers, multiple imaging tests, multiple attempted treatments, spent $$$
  - If failed non-surg, then just be open and clear about surgical expectations

Injections

- Ultrasound > fluoroscopy > "landmark"-guided
- 4 different situations
  - 5 mL 1% lidocaine, 5 mL 0.5% ropivacaine, 1 ml 40 mg/mL methylprednisolone
  - 5 mL 1% lidocaine only (diagnostic)
  - Leukocyte poor platelet rich plasma (1X)
  - Viscosupplementation (rare)

Ultrasound Hip Anatomy

- Ultrasound for orthopedic surgeons
- Purposes:
  - Injections:
    - Intra-articular
    - Peritrochanteric
    - DGS
  - Dynamic evaluations of snapping:
    - Iliopsoas
    - IT band
    - Ischiofemoral

Ultrasound Basics

CPT® Code : 20611

xRefs-9 | xRefs-10 | Detail | RVU Detail | Calculator | Global Service Data | CCI - Include

CPT® RVU Code: 20611 **Description:** Drain/inj joint/bursa w/us

Current Year ○ Previous Year

Physician's Work RVU:	1.10	Multiple Procedures:	2
Facility Practice Expense RVU:	0.51	Bilateral Surgery:	1
Non-Facility Practice Expense RVU:	1.35	Assistant-at-Surgery:	1
Malpractice RVU:	0.17	Co-Surgeons:	0
Facility Total:	1.78	Team Surgery:	0
Non-Facility Total:	2.62		
Global Period:	0		

Ultrasound Basics

- Ultrasound-guided hip injection (20611)
  - 1.1 wRVU
- Cam (29914)
  - 14.67 wRVU
- Labral repair (29916)
  - 15.00 wRVU
- Level 3 New patient office visit
  - 1.42 wRVU
- Level 3 Established patient office visit
  - 0.97 wRVU

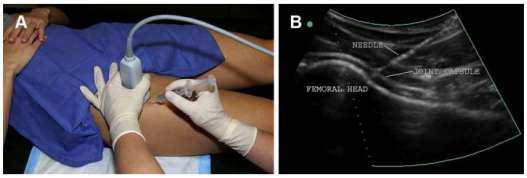
Ultrasound In Hip Practice

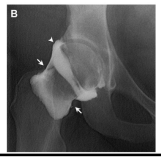
Ultrasound-Guided Hip Injections: A Comparative Study With Fluoroscopy-Guided Injections

J. W. Thomas Byrd, M.D., Elizabeth A. Potts, M.S.N., A.P.N., A.C.N.P.-B.C., Rachel K. Allison, R.T., and Kay S. Jones, M.S.N., R.N.

- Convenience: ultrasound 9.8; fluoroscopy 3.1
- Pain: ultrasound 3.0; fluoroscopy 5.6
- 49/50 patients preferred ultrasound

Ultrasound In Hip Practice





- ***PEARL:***
  - More resistance if needle at zona

Ultrasound Advantages

- More convenient, less pain for patient
- No ionizing radiation exposure
- Highly accurate injection (~98%)
- You can inquire pain response (diagnostic)
- You get credit (wRVU, $$$)
- Can eval other structures around hip
- Disadvantages:
  - Takes time, learning curve, cost to purchase machine, transducers

Hip Surgery for Mild OA

- Hip preservation surgery
  - Arthroscopy
  - Open surgical dislocation
- Arthroplasty
  - Resurfacing
  - Total hip arthroplasty

Hip Surgery for Mild OA

Joint Space Predicts THA After Hip Arthroscopy in Patients 50 Years and Older

Marc J. Philippon MD, Karen K. Briggs MPH,
John C. Carlisle MD, Diana C. Patterson BA

- 96 patients, >50 yo
- Prediction of THA:
  - 81% - joint space
  - 73% - KL grade
  - 65% - Tonnis grade
- The ***only predictor*** of THA was joint space <2 mm

Hip Surgery for Mild OA

The Effect of Joint Space on Midterm Outcomes After Arthroscopic Hip Surgery for Femoroacetabular Impingement

Jack G. Skendzel,* MD, Marc J. Philippon,*† MD,
Karen K. Briggs,* MPH, and Peter Goljan,* MD
Investigation performed at Steadman Philippon Research Institute, Vail, Colorado, USA

- 466 patients; mean age 40 years
  - 86% with less than 2 mm joint space – THA
    - 3.3 years
  - 16% with more than 2 mm joint space – THA
    - 7.3 years
  - In those that did not undergo THA, better HOS-ADL, HOS-SSS in >2mm

Hip Surgery for Mild OA

What Factors Predict Conversion to THA After Arthroscopy?

John M. Redmond MD, Asheesh Gupta MD, Kevin Dunne BA,
Ammar Humayun MBBS, Leslie C. Yuen BA, Benjamin G. Domb MD

Age	Points
10	0
15	2
20	4
25	6
30	8
35	10
40	12
45	14
50	16
55	18
60	20
65	22
70	24
75	26
80	28

Preop mHHS	Points
0	22
10	20
20	18
30	16
40	14
50	12
60	10
70	8
80	6
90	4
100	2

Femoral Anteversion	Points
-30	21
-20	19
-10	16
0	13
10	10
20	8
30	5
40	3
50	0

LCEA	Points
10	24
15	21
20	19
25	16
30	14
35	11
40	8
45	5
50	3
55	0

Acetabular Overbridge	Points
0	9
1	0
2	9
3	14
4	15

Femoral Outerbridge	Points
0	4
1	0
2	10
3	10
4	13

Revision Surgery	Points
No	0
Yes	8

Add up points for each variable to get total points. Then look up risk below.

Total Points	THA risk at 27 mos
49	0.01
55	0.02
61	0.04
69	0.10
75	0.20
82	0.40
89	0.70
94	0.90
100	0.99

Hip Surgery for Mild OA

What Factors Predict Conversion to THA After Arthroscopy?

John M. Redmond MD, Asheesh Gupta MD, Kevin Dunne BA, Ammar Humayun MBBS, Leslie C. Yuen BA, Benjamin G. Domb MD

- Outerbridge Grade IV femoral head (RR 3.0)
- Revision surgery (RR 2.4)
- Older age (RR 1.1)
- Lower preop mHHS (RR 1.0)
- Decreased femoral version (RR 1.0)

Conclusions

- Ensure non-surgical measures have been adequately attempted and failed
- Education is significant component of non-surgical treatment, frequently ignored
- Arthroscopy success is varied, worse with certain patient- and hip-specific factors
- THA is the most successful orthopedic operation in history

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