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# Patients associated with spine or other major joint pain have equivalent outcomes to patients with isolated hip pain after hip arthroscopy

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# Disclosures

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## Ms. Sarah Remedios:

- Nothing to disclose.

## Dr. Ivan Wong:

### *Speakers Bureau*

- Smith and Nephew, DePuy Synthes Mitek Sports Medicine, Linvatec, Bioventus

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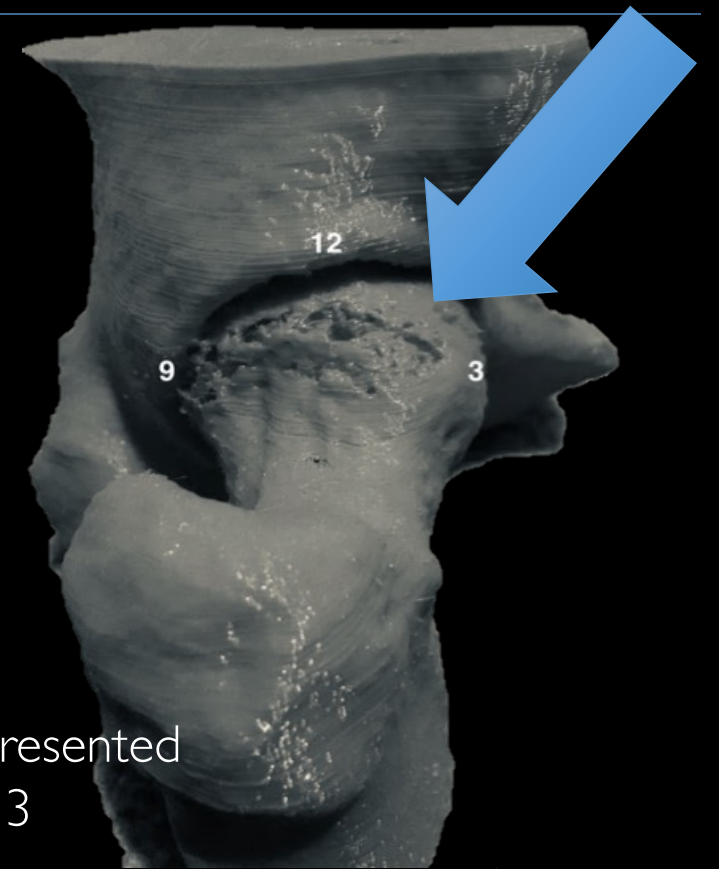
- AJSM , ARTH

### *Organizations*

- Research Chair AANA, Shoulder Committee ISAKOS, President AAC

# Hip Arthroscopy for Femoroacetabular Impingement (FAI) yields favorable outcomes compared to conservative treatment<sup>1</sup>

- FAI is a condition that is concerned with abnormalities in either or both the femoral head-neck junction, or acetabulum<sup>2</sup>
- FAI can lead to severe hip and groin pain



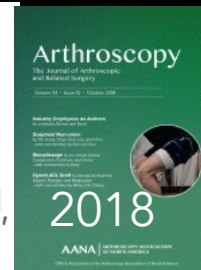
FAI, specifically CAM, presented from the 12 o'clock to 3 o'clock position

# Patient reported outcomes (PROs) are used to determine the effect of hip arthroscopy on patients with FAI

- It has recently been found that pain in other major joints and the spine may negatively affect PROs, post-operatively

## The Influence of Pain in Other Major Joints and the Spine on 2-Year Outcomes After Hip Arthroscopy

Natalie L Leong<sup>1</sup>, Ian M Clapp<sup>2</sup>, William H Neal<sup>2</sup>, Edward Beck<sup>2</sup>, Charles A Bush-Joseph<sup>2</sup>, Shane J Nho<sup>2</sup>



- As an example, patients with *hip pain only* pre-operatively had higher outcome scores than patients with a combination of different sources of pain (i.e., spine and/or other major joints)<sup>3</sup>

Objective: To determine if patients with spine or other major joint pain have worse pre- and post-operative PROs than patients without additional back or joint pain

# Methodology

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Included if:

- underwent hip arthroscopy for FAI between 2016 and 2020
- available pre-operative pain diagram

Excluded if:

- history of ipsilateral hip surgery
- underwent additional surgery (except the contralateral hip) within 6-months

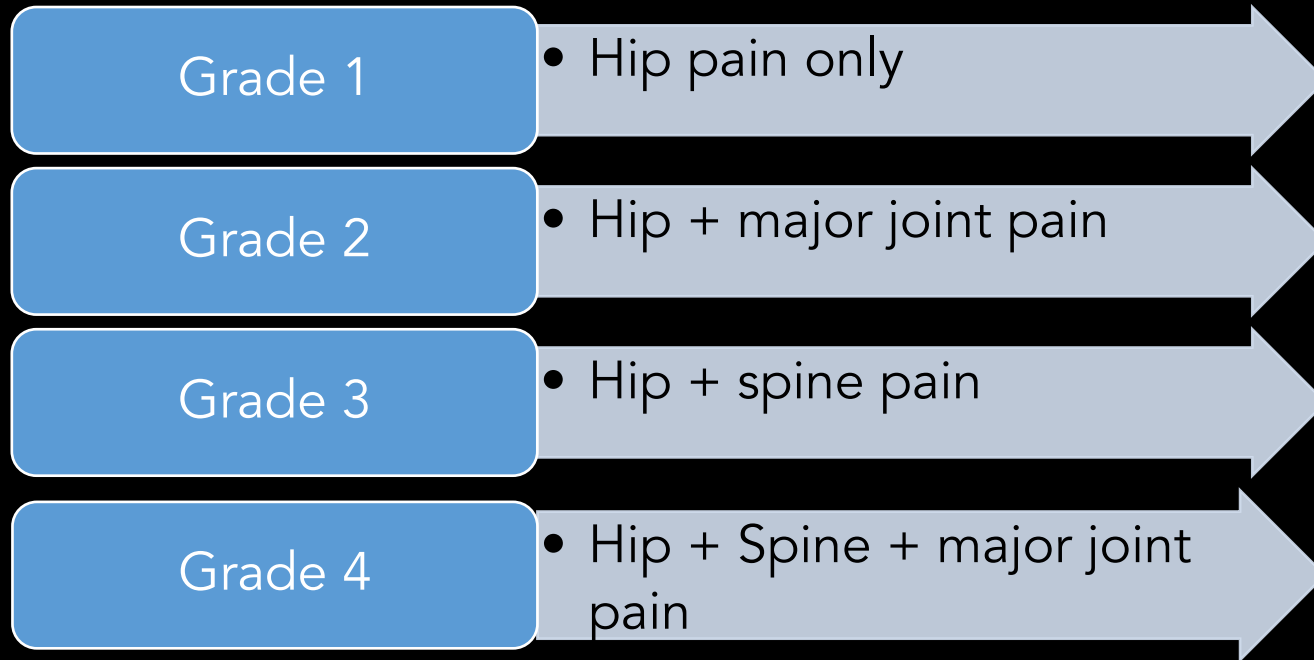
Patient Pain Grouping

- Included patients were then grouped using the musculoskeletal morbidity (MSM) grade<sup>4</sup> (Figure on next slide)

# The Influence of Arthritis in Other Major Joints and the Spine on the One-Year Outcome of Total Hip Replacement

A Prospective, Multicenter Cohort Study (EUROHIP)  
Measuring the Influence of Musculoskeletal Morbidity

Joerg Huber, MD, Paul Dieppe, MD, Karsten Dreinhoefer, MD, Klaus-Peter Günther, MD, and Andrew Judge, BSc, MSc, PhD



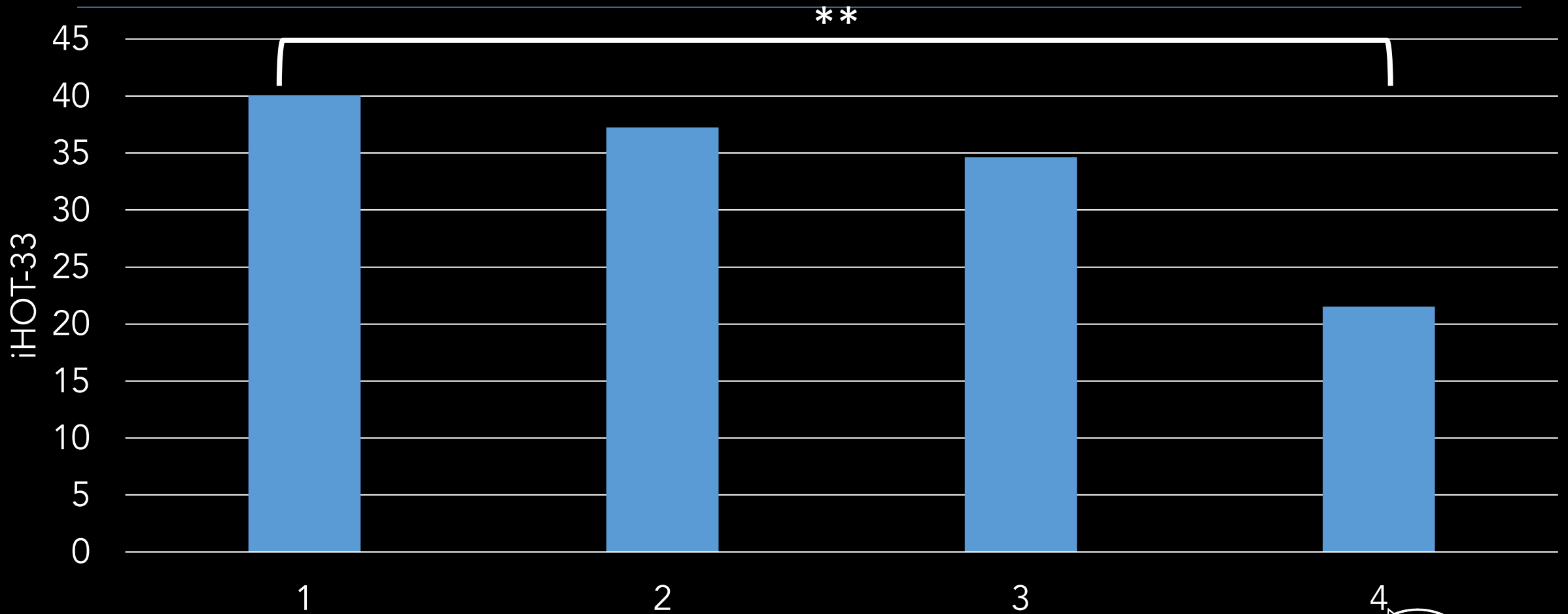
**Primary Outcomes:**  
Pre- and post-operative iHOT-33 scores between patients categorized into different MSM groups

Results: After consideration of the inclusion and exclusion criteria, 122 patients were included in the final analysis with a mean age of 37.16 and mean follow up time of 31.5 months

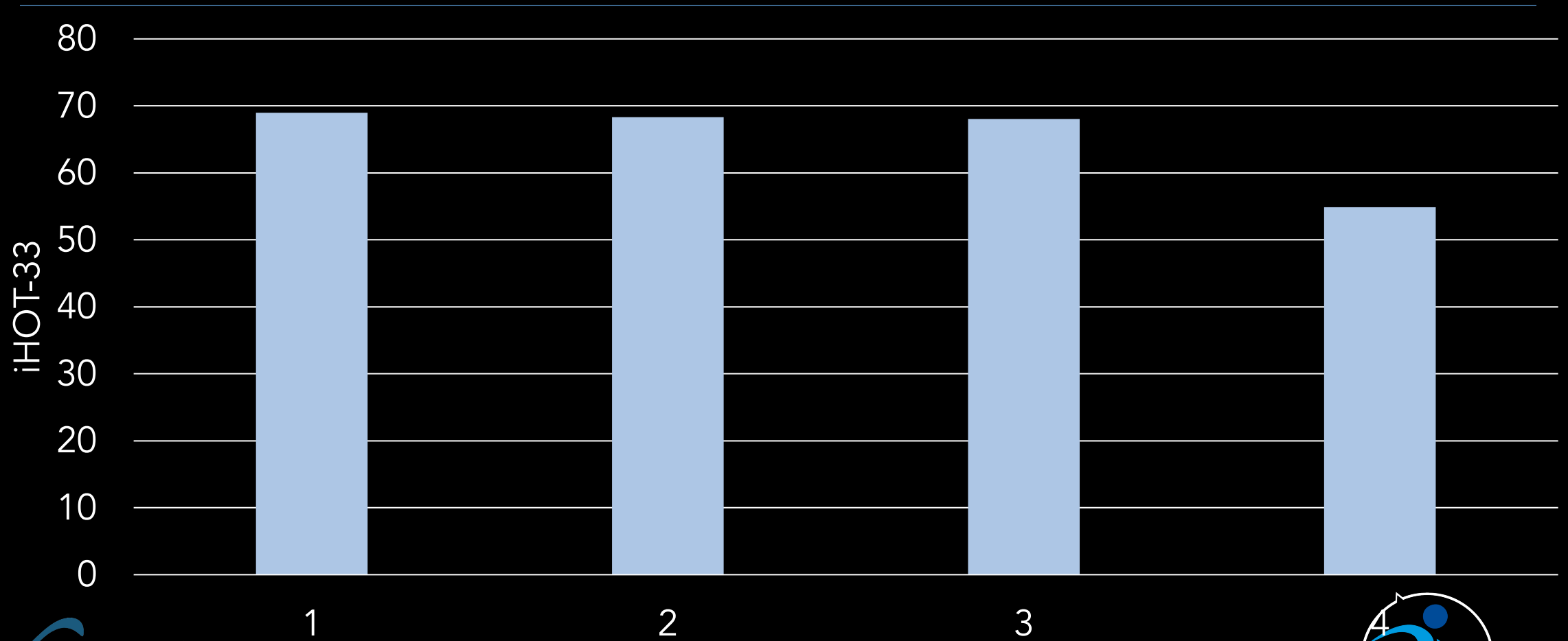
Variables	MSM Grade 1 (n=62)	MSM Grade 2 (n=23)	MSM Grade 3 (n=22)	MSM Grade 4 (n=15)	p-value
Age at Surgery	35.76 + 11.25	40.63 + 14.00	36.62 + 9.53	38.61 + 11.88	0.363
Sex					
Male(Female)	30 (32)	8 (15)	4 (18)	3 (12)	<b>0.033</b>
Operative Side					
Right (Left)	38 (24)	12 (11)	13 (9)	10 (5)	0.822



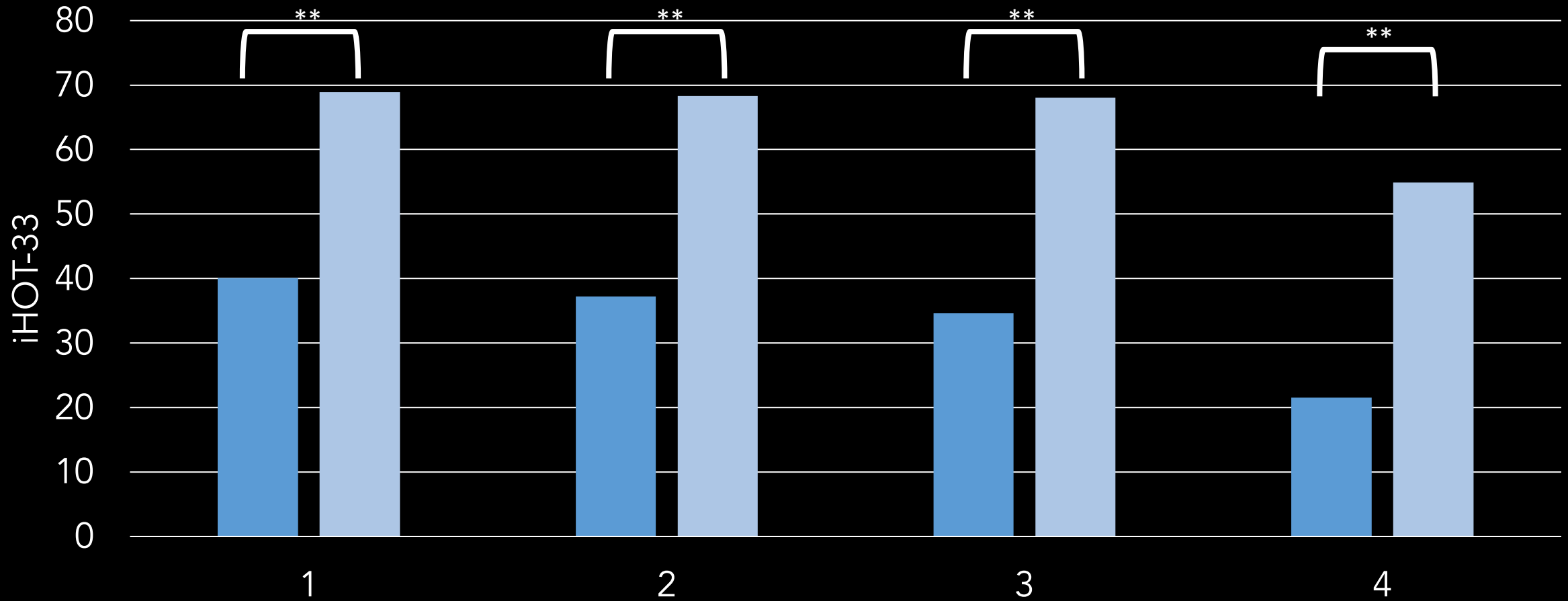
Results: MSM grade 4 showed significantly lower iHOT-33 scores pre-operatively from MSM grade 1



Results: Different pre-operative conditions among MSM groups 1 and 4 did not result in significant differences post-operatively, indicating that hip arthroscopy for FAI provides benefits to all populations, even those with worse overall pain pre-operatively

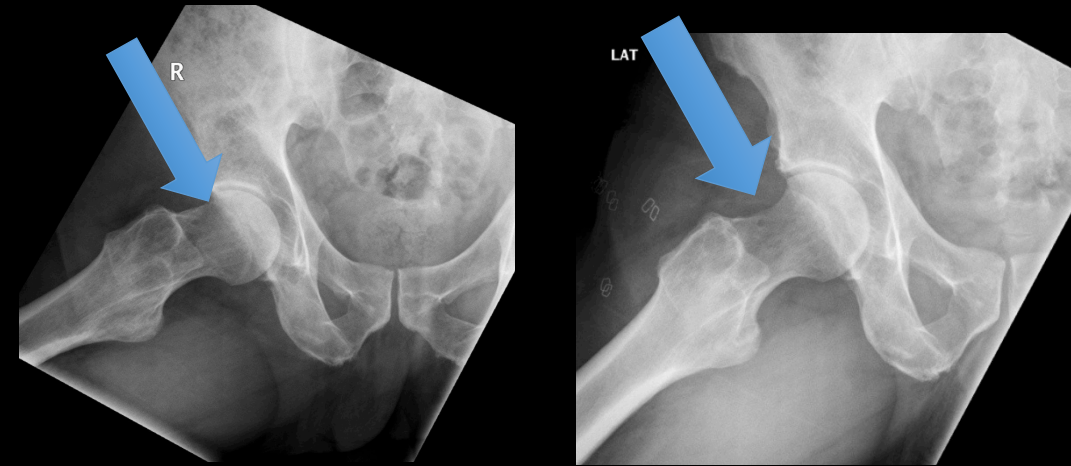


# Results: All patients demonstrated significant improvement post-operatively with respect to their iHOT-33 scores



# Discussion

- Additional research has demonstrated the positive influence on hip and back function and pain in patients with coexisting spine pathology following surgical intervention for FAI<sup>5</sup>
- While it is important to consider overall bodily pain of individuals prior to hip arthroscopy, our study suggests all patients despite varying additional joint or back pain, significantly benefit from hip arthroscopy for FAI



Pre-operative (left) and post-operative (right) x-ray imaging following hip arthroscopy for FAI.

# Conclusion

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Treatment of FAI with hip arthroscopy yields improved iHOT-33 scores post-operatively and patients associated with spine or other major joint pain have equivalent PROs to patients with isolated hip pain

## References

1. Minkara AA, Westermann RW, Rosneck J, Lynch TS. Systematic Review and Meta-analysis of Outcomes After Hip Arthroscopy in Femoroacetabular Impingement. *Am J Sports Med.* 2019;47(2):488-500.
2. Beck M, Kalhor M, Leunig M, Ganz R. Hip morphology influences the pattern of damage to the acetabular cartilage: FEMOROACETABULAR IMPINGEMENT AS A CAUSE OF EARLY OSTEOARTHRITIS OF THE HIP. *The Journal of Bone and Joint Surgery British volume.* 2005;87-B(7):1012-1018.
3. Leong, N. L., Clapp, I. M., Neal, W. H., Beck, E., Bush-Joseph, C. A., & Nho, S. J. (2018). The Influence of Pain in Other Major Joints and the Spine on 2-Year Outcomes After Hip Arthroscopy. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, 34(12), 3196-3201.
4. Huber, J., Dieppe, P., Dreinhofer, K., Günther, K., & Judge, A. (2017). The Influence of Arthritis in Other Major Joints and the Spine on the One-Year Outcome of Total Hip Replacement. *The Journal of Bone and Joint Surgery*, 99(17), 1428-1437. doi:10.2106/jbjs.16.01040.
5. Sun Y, Thompson KA, Darden C, Youm T. Surgical Intervention for Femoroacetabular Impingement Can Lead to Improvements in Both Hip and Back Function in Patients With Coexisting Chronic Back Pain at 1-Year Follow-Up. *Arthroscopy: The Journal of Arthroscopic & Related Surgery.* 2021;37(4):1163-1169.e1.