

A LATERAL/MEDIAL JOINT SPACE RATIO < 1 *Significantly Decreases 15-Year Hip Arthroscopy Survivorship*

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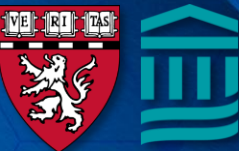
On Behalf of the Dr. Scott D. Martin Research Team

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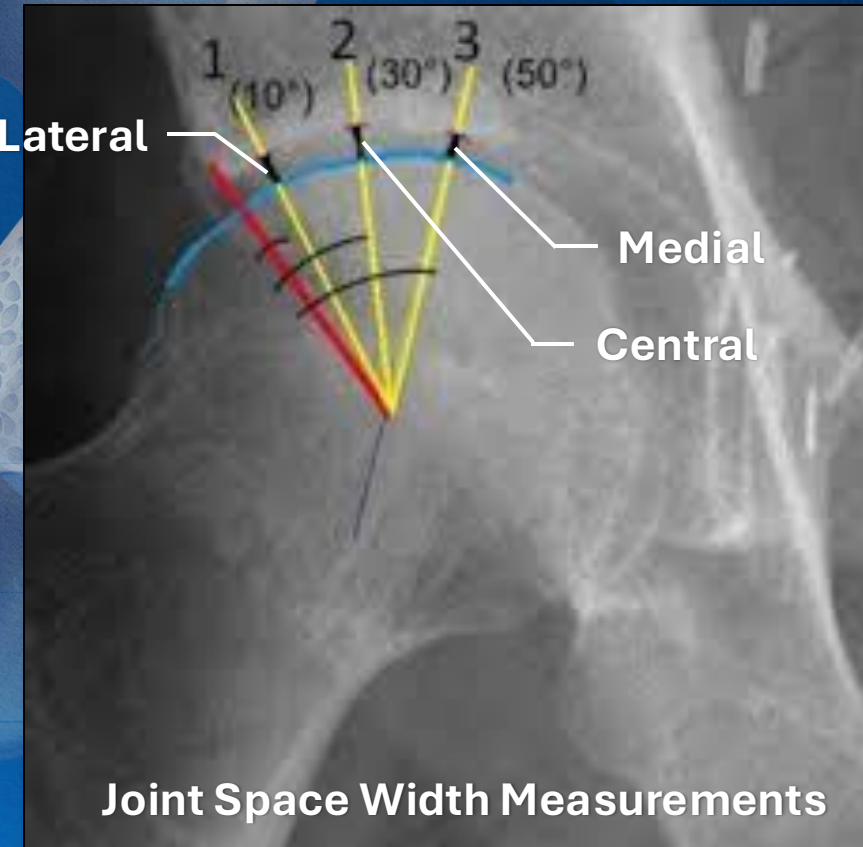


DISCLOSURES

- *Research Support provided by:*
- ***The Conine Family Fund for Joint Preservation***
- I (and/or my co-authors) have nothing to disclose directly related to this talk.
- I have no conflicts.

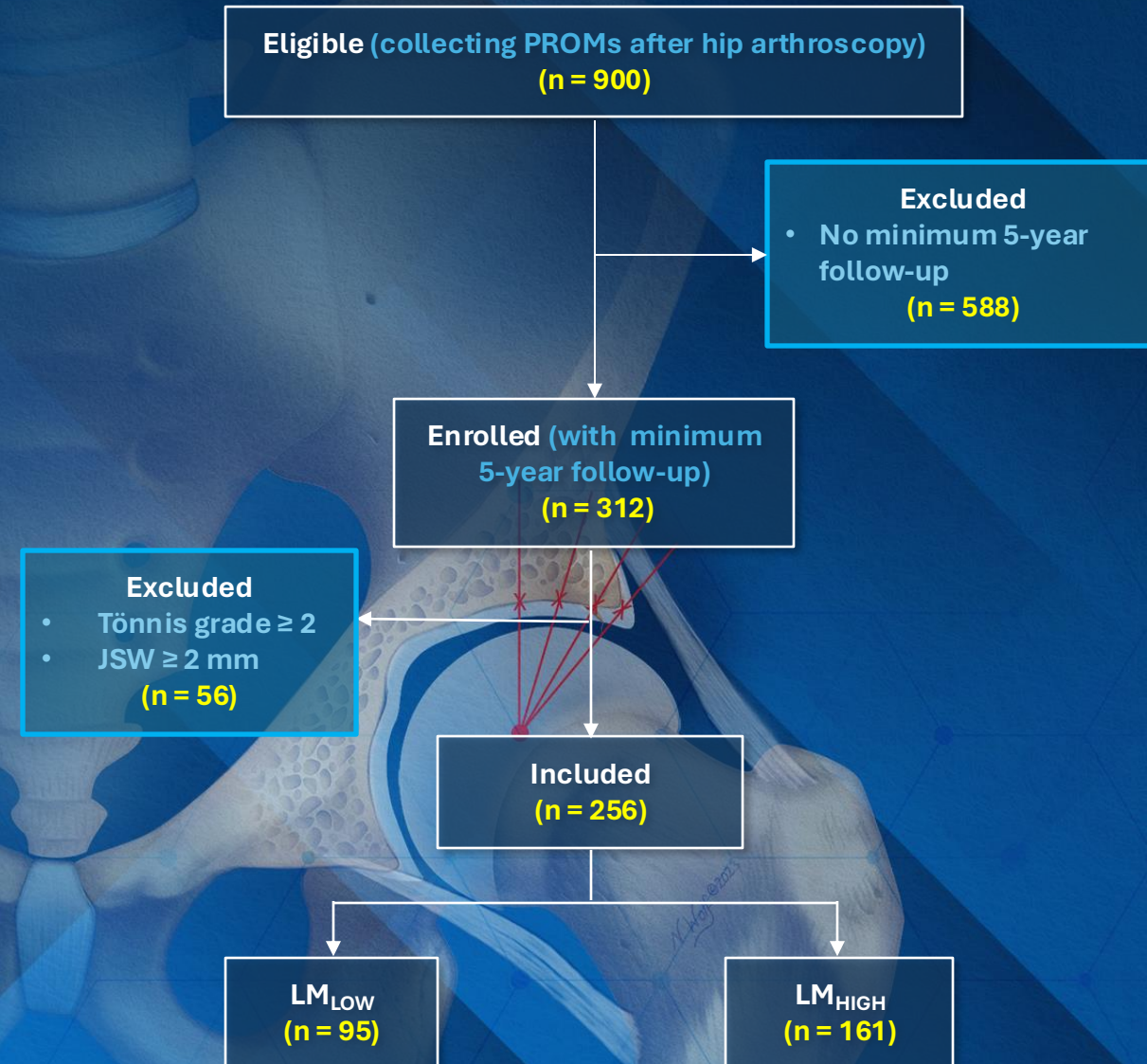
PURPOSE

- Lateral/medial femoroacetabular joint space ratio (LM ratio) < 1
 - Does it predict 15-year THA-free survivorship?
- Lateral/Medial Joint Space Ratio
 - Measurements performed at 3 fixed locations
 - Polar coordinate system
 - 10° [lateral]
 - 30° [central]
 - 50° [medial]



METHODS

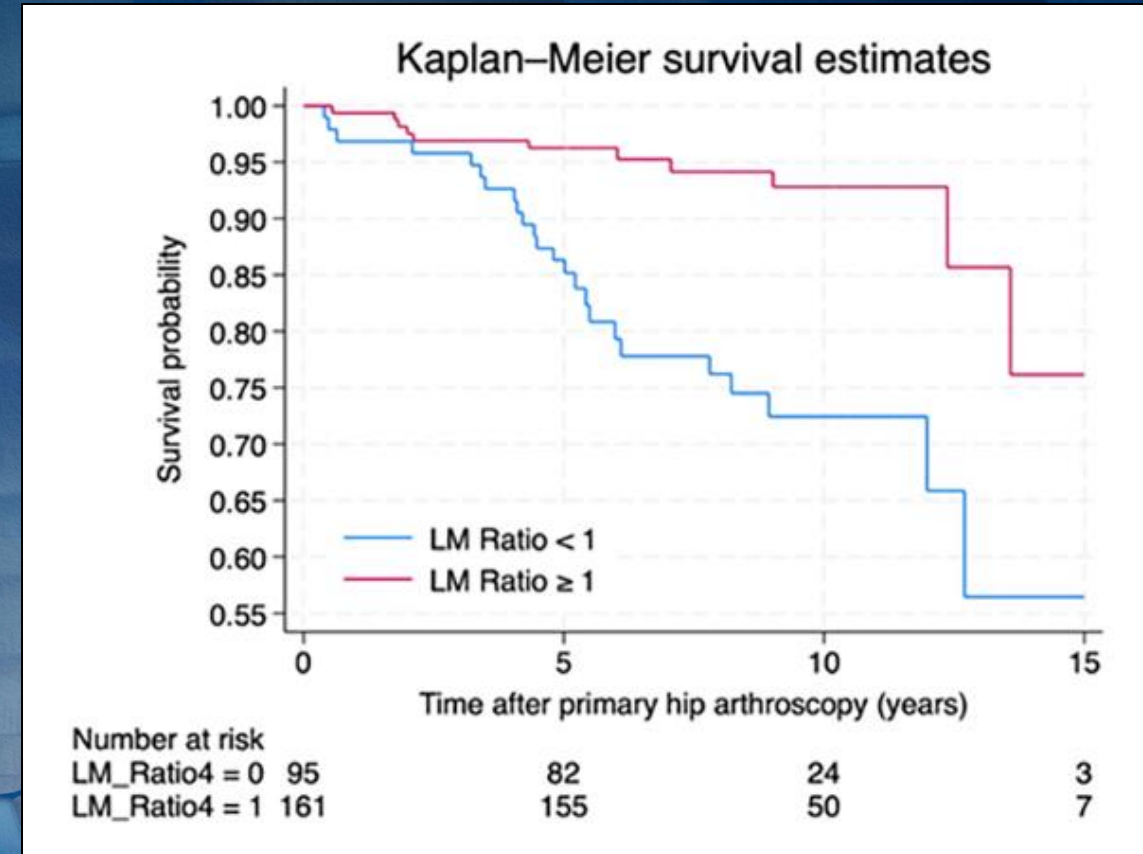
- 256 patients
 - Age ≥ 18 yrs
 - Arthroscopic repair of symptomatic acetabular labral tears
 - 2° to FAI
 - Minimum 5-yr follow-up
 - Tönnis grade 0 or 1
 - JSW > 2 mm
- LM_{Low}: 95 (37.1%) vs LM_{High}: 161 (62.9%)
- Femoroacetabular joint space width (JSW)
 - Collected using computer-assisted, semi-automated method
 - Lateral/medial joint space ratio
 - Calculated by dividing (lateral JSW / medial JSW)
- Study population cohorts
 - LMLow
 - LM ratio < 1
 - LMHigh
 - LM ratio ≥ 1
 - 15-year THA-free survivorship
 - Unadjusted Kaplan-Meier survival curves analyzed by log-rank test
- Weighted Cox regression
 - to identify independent adjusted-risk factors for converting to THA
 - adjusted for baseline demographics, intraoperative findings



RESULTS

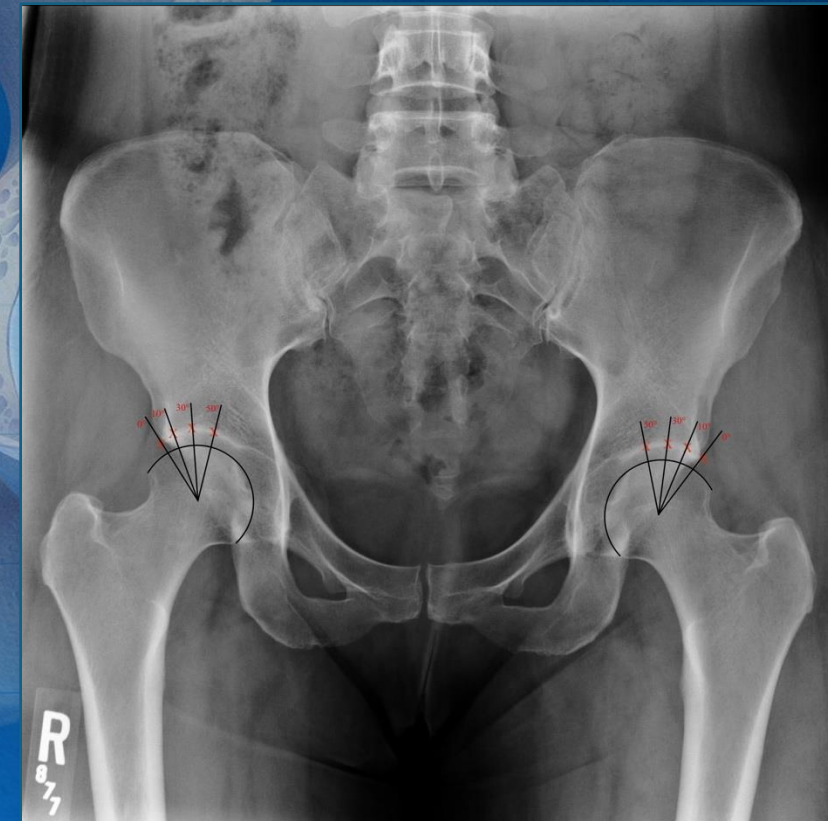
- No differences between LM cohorts for
 - **Age**
 - LM_{Low}: 39.0 ± 11.3 years
 - LM_{High}: 37.6 ± 11.6 years
 - P=.341
 - **BMI**
 - LM_{Low}: 25.6 ± 4.2 kg/m²
 - LM_{High}: 25.8 ± 4.3 kg/m²
 - P=.698
- <15 years
 - **Significantly greater proportion of LM_{Low} patients underwent THA**
 - 24 (25.26%) vs 11 (6.83%)
 - P<.0001
- **Weighted cox regression**
 - **LM < 1 increased 15-year risk of converting to THA by 139%**
 - P=.024
 - Controlling for
 - Age
 - Sex
 - BMI
 - FAI type
 - Outerbridge grade
 - Beck classification of transition zone cartilage damage
 - Labral procedure (repair vs. debridement)

Survivorship of low and high LM ratio cohorts



CONCLUSIONS

- Understanding relationships important
 - Between radiographic findings & long-term outcomes / survivorship
 - After hip arthroscopy for acetabular labral tears
- Prognosticators for certain outcomes
 - can be accommodated in treatment plan
- Patients with $LM < 1$
 - 139% higher adjusted-risk of converting to THA
 - when assessing 15-year THA-free survivorship



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THANK YOU

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Questions?

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