

# EFFECTIVE MANAGEMENT OPTIONS FOR TREATMENT OF MICROINSTABILITY OF THE HIP: A SCOPING REVIEW

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# Disclosures

- Dr. Olufemi R Ayeni declares that he has a non-financial conflict of interest as he is associated with the Speakers Bureau for Conmed and Stryker Canada. Dr. Ayeni holds a Tier 2 Canada Research Chair in Joint Preservation Surgery.

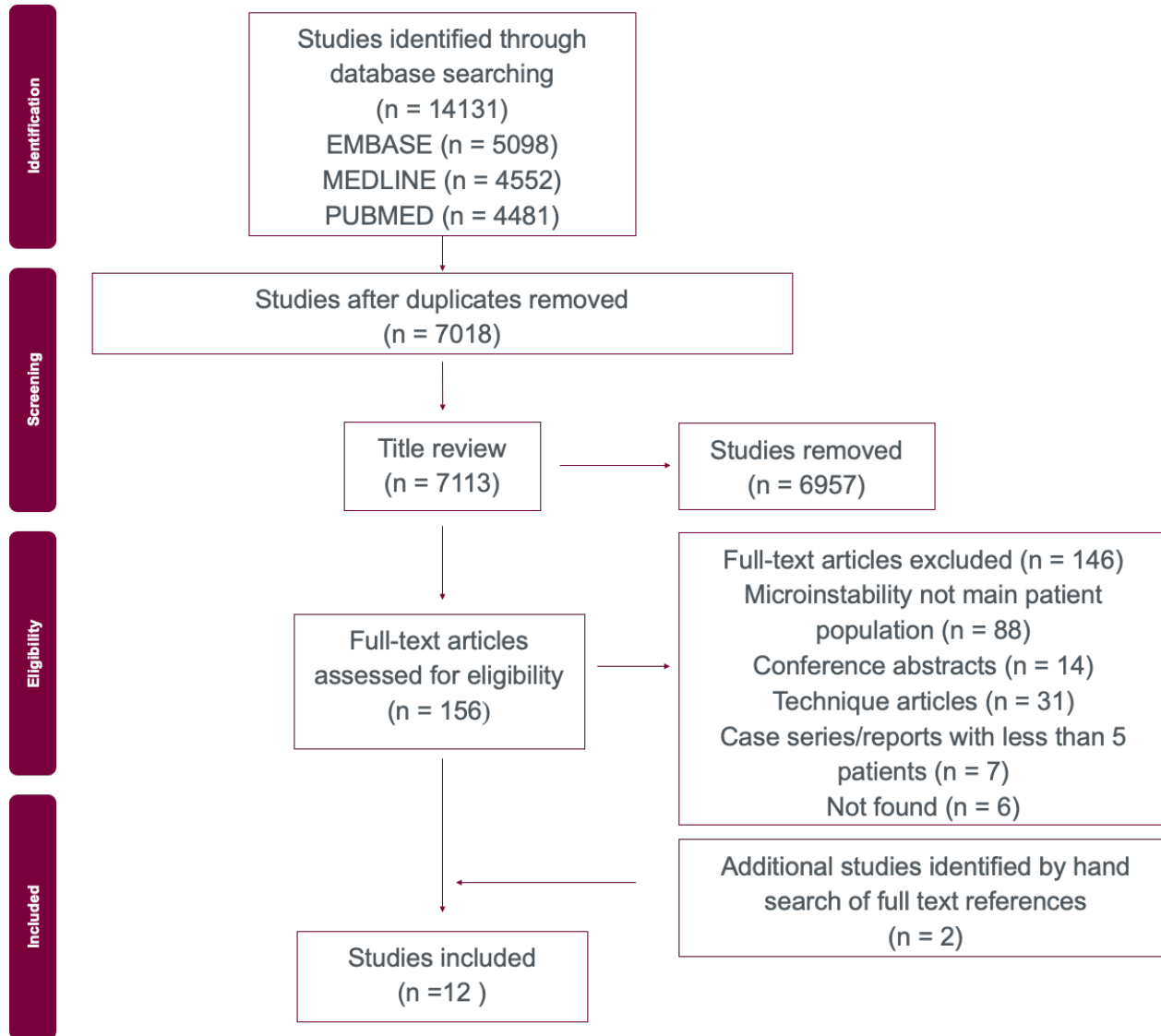
# Introduction

- Hip microinstability is defined as extra physiologic motion of the hip that results in pain and subjective unsteadiness.
- Potential etiologies for this increased movement include abnormalities of bone or soft tissue, connective tissue disorders, trauma or repetitive microtrauma, iatrogenic injuries, and idiopathic causes.

# Objective

- To review recent literature identifying and summarizing the research involving management of microinstability of the hip, and to highlight new and evolving techniques in its treatment.

# Methods



- This scoping review was conducted in accordance with the PRIMSA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) extended guidelines for conducting and reporting scoping reviews.
- Inclusion criteria were (1) therapeutic studies of all levels of evidence; (2) English language studies; (3) human studies; and (4) studies reporting on the management and outcomes of patients with a diagnosis of hip microinstability, with minimum 12-month follow-up.

# Results

- 12 studies were included, with 3 studies examining ligamentum teres reconstruction, 2 examining capsular plication, 2 examining capsular repair, 1 examining remplissage procedures, 1 examining non-operative therapy, 2 examining capsular reconstruction, and 1 examining microinstability in Ehlers Danlos Syndrome.
- Non-operative rehabilitation therapy is recommended as the first step in treatment of hip microinstability.
- Repair of residual capsular defects has good outcomes with high patient satisfaction

# Results

- Capsular plication remains the gold standard for hips with increased pain that show signs of capsular laxity/deficiency.
- Capsular reconstruction has shown equivalent results to other revision arthroscopy procedures with low rates of complications.
- Ligamentum teres pathology, although rare, should be considered as a source of pain particularly in patients with laxity on exam.
- The ligamentum teres may take on more load in patients with collagen disorders, leading to pathologic tearing and pain. Maintenance of anatomy and soft tissue stability is even more important in this population.
- In cases where CAM over-resection has occurred, remplissage using an allograft is an effective option for restoring the capsular suction seal and stability.

# Discussion & Conclusion

- Hip microinstability is an increasingly recognized cause of hip pain, particularly post-operative pain following FAI surgery.
- Non-operative therapy will resolve symptoms in greater than 2/3 of patients reporting hip-related pain.
- Capsular repair in the standard population and capsular plication in the hypermobile population should be considered at primary arthroscopy for optimal results.
- Pain caused by capsular defects can be corrected with restoration of the iliofemoral ligament by capsular repair or reconstruction.
- Loss of suction seal caused by cam over-resection can be restored with an ITB autograft or allograft.
- Improved evidence, including well-designed prospective studies with large sample sizes, will determine future management of this complex problem.



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