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# Systematic literature review with meta-analysis concluded that age should not be a sole or primary factor when determining meniscal repair suitability in older patients (≥40 years)

Sedgwick MJ, Saunders C, Getgood AMJ. Systematic review and meta-analysis of clinical outcomes following meniscus repair in patients 40 years and older. *Orthop J Sports Med.* 2024;12(8):23259671241258974.

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## Key points

Meniscal repair in older patients achieved:

**87.4% success rate**

**27%** Lower risk of meniscal failure (p=ns)

**Similar post-operative Lysholm score** compared to younger patients

## Overview

- Systematic literature review with meta-analysis to establish the clinical performance of meniscal repair in older patients (≥40 years) compared to younger patients (<40 years)
- Studies came from two previously published systematic literature reviews and an updated search on Embase and PubMed from 1 January 2017 – 29 September 2021 using search terms ("meniscus repair" OR "meniscal repair") AND ("age" OR "old" OR "older")
- In total, 14 articles were included and comprised 6 retrospective cohort studies, 5 retrospective case series studies and 3 prospective case series studies
- Outcomes of interest included success or failure rate (as defined by the study), rate of revision meniscectomy or meniscus repair rate and patient-reported outcome measures (PROMs)

## Results

In the systematic literature review with meta-analysis:

- Across the published studies, 466 older patients (maximum age range: 50–70 years) and 4,423 younger patients underwent meniscal repair
- Meniscal repair was successful in 87.4% of older patients (401/459; Figure)
  - Meniscal failure occurred in 12.6% of older patients (58/459; 95% confidence interval [CI]: 7.3–19.4)
  - 9.8% of older patients had to undergo meniscal revision procedures (45/459; 95% CI: 6.2–15.0%)
- Risk of a meniscal failure was lower for older patients than younger patients (relative risk [RR] = 0.73; CI: 0.44–1.21; p=ns)
- Post-operative PROM, Lysholm score, in older patients was rated 'good' (86.7; 4 studies; 95% CI: 81.7–91.7) which was similar to younger patients (p=ns)

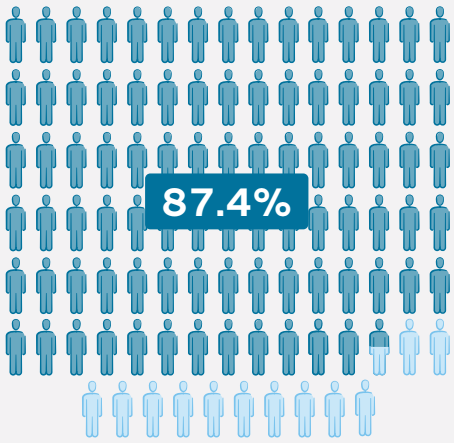


*Figure. Meniscal repair was successful in 87.4% of older patients*

## Conclusions

Meniscal repair in older patients can be performed successfully with a low failure rate and good patient-reported outcome measures. Therefore, age should not be the primary or sole factor when deciding whether to perform a meniscal repair.

## Considerations

Risk of bias due to selection of patients, the decision to perform meniscus repair may be based on different criteria for younger and older patients affecting outcomes.

Sports Medicine, Smith & Nephew, Inc. 150 Minuteman Road, Andover MA, 01810 USA.
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