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High Variability Exists in Reporting Clinical and Patient-Reported Outcome Measures Following Meniscal Surgery

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High Variability Exists in Reporting Clinical and Patient-Reported Outcome Measures Following Meniscal Surgery

Purpose: To evaluate the variability in outcomes following surgical meniscal repair and compare responsiveness between patient reported outcome measures (PROMs).

Methods: A systematic search of the PubMed/MEDLINE and Web of Science databases was performed according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines. A total of 257 unique studies met inclusion criteria. Patient and study attributes were extracted, including pre- and postoperative means for PROMs. Of the studies that met inclusion criteria for responsiveness analysis (2+ PROMs reported, 1-year minimum follow-up; n=172), we compared the responsiveness between PROM instruments using effect size and relative efficiency (RE) if a PROM could be compared to another in at least 10 articles.

Results: A total of 18,612 patients (18,690 menisci, mean age = 38.6 years, mean body mass index = 26.3 kg/m²) were included in this study. Thirty-five different PROM instruments were identified, and the mean number of PROMs in each article was 3.6. The most cited PROMs were Lysholm (74.5%) and International Knee Documentation Committee (IKDC) (51.0%). IKDC was found to be more responsive than other PROMs, which include Lysholm (RE=2.29), Tegner (RE=3.90), and Knee Injury and Osteoarthritis Outcome Score (KOOS) Activities of Daily Living (ADL) (RE=1.08). KOOS Quality of Life (QoL) was also more responsive than other PROMs, such as IKDC (RE=1.42) and KOOS ADL (RE=1.43). Lysholm was more responsive compared to KOOS QoL (RE=1.14), KOOS ADL (RE=1.96), and Tegner (RE=3.53).

Conclusion: Our study found that IKDC, KOOS QoL, and Lysholm were the most responsive PROMs.