

Evaluation of Male and Female Subjective SANE Scores During Return to Sport Testing 6 Months Status Post ACL Reconstruction

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Background

- Factors affecting psychological readiness are an understudied, yet critical component when considering return to sport rates in patients' post-surgical treatment plans.
- Previous studies have suggested gender differences in subjective scoring, specifically for the International Knee Documentation Committee (IKDC) subjective score. However, it is unclear if this result is consistent in other PROMs, such as the Single Assessment Numeric Evaluation (SANE).
- The present study aimed to investigate the presence of gender differences in self-scoring outcomes 6 months after ACL reconstruction using the SANE score



Methods

- Retrospective study that analyzed clinical return to sport data from the quality movement assessment (QMA) and musculoskeletal assessments for male and female patients who had undergone ACL reconstruction
- Patient SANE scores were analyzed across sex, age, sports participation, and ACL graft type.
- Patient SANE scores were also evaluated at the time of the second QMA, 9 months post-surgery



Results

- 114 patients were analyzed after QMA at 6 months postsurgery
 - 61.4% (70) were female, with an age range between 13-55 years old (mean age 22 ± 8.9)
- 47 patients were analyzed after second QMA at 9 months post-surgery.
 - 55.3% (26) were female, with an age range between 13-38 years old (mean age 19.5 ± 5.3).
- When stratified by age, sports participation, and ACL graft type there was **no significant difference** between SANE scores in males and females at 6- or 9-months post operatively (p>0.05).

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Results

Table 1. Average SANE Scores 6 vs. 9 Months Post ACL Reconstruction.

QMA 1 (6 Month RTS)	Mean SANE Score	SD	Count	P value			
Males	79.7	10.9	44				
Females	79.8	13.2	70				
				P = 0.94			
QMA 2 (9 Month RTS)							
Males	89.4	7.7	21				
Females	90.2	6.5	26				
				P = 0.70			

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Results

Table 2. Comparison of Average SANE Scores of Males & Females at 6- & 9-Months Post ACL Reconstruction.

QMA 1-2	Mean SANE Score	SD	Count (%)	P value
Male QMA 1	79.7	10.9	44	
Male QMA 2	89.4	7.7	21	
				P < 0.001
Female QMA 1	79.8	13.2	70	
Female QMA 2	90.2	6.5	26	
				P < 0.001



Conclusions

- We found no clinically significant difference in SANE scores between males and females at 6- & 9months post ACLR
- Male and female patients demonstrated significant improvements in SANE scores from 6 to 9 months post operatively
- Supports delaying return to play later than 6 months
- Future studies should observe a larger cohort of athletes, investigating gender differences in SANE scores after functional testing



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