

Patient Perception of Allograft versus Autograft in Anterior Cruciate Ligament Reconstruction Using a Validated Online Survey Marketplace

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INTRODUCTION: Anterior cruciate ligament (ACL) reconstruction is the gold standard treatment for ACL tears. Reconstruction is accomplished through the use of an allograft or autograft. This study sought to evaluate the general population's perception of the use of allografts and autografts in ACL reconstruction.

METHODS: A prospective cohort study was performed utilizing a 35-question survey. Participants were paid, and the survey was distributed via a clinically validated, public, online marketplace in June 2023. After collecting baseline demographics, participants were queried on whether they held a preference for ACL reconstruction with an allograft or an autograft. All respondents then sequentially completed a pre-information survey, reviewed information from an evidence-based information sheet (Figure 1), followed by a post-information survey to assess their understanding of the provided material. Upon completion, participants were again asked which treatment modality they would prefer. Participants were then queried on whether or not they would be willing to change their preference based on surgeon recommendation. Finally, participants were asked to rank the factor that was most influential to their final decision.

RESULTS: In total, there were 491 participants that completed the survey. The average age was 39.9 (range, 19-72), there were 244 males, 241 females and 6 that preferred not to respond. A total of 362 (74%) patients reported earning at least a bachelor's degree and 362 (74%) reported that they did not work in health care. Prior to reading the provided information sheet, 276 (56%) said they had no graft preferences, 146 (30%) preferred autograft, 69 (14%) preferred allograft. After reading the provided information sheet, 226 (46%) participants reported that they preferred autograft, 185 (38%) preferred allograft, and 80 (16.3%) had no preference. The average score on the pre-information test was 45%, the average score on the post-information test was significantly greater, 61% ($p < 0.01$). In total, 345 patients (70%) stated they would change their preference for autograft or allograft if their surgeon recommended the other. Surgeon preference ($n=330$, 67%), educational information provided on the information sheet ($n=117$, 24%), followed by previous knowledge ($n=44$, 9%) were identified as the most important factors for making an ACL graft selection.

DISCUSSION AND CONCLUSION: Surgeon recommendation was found to be the most influential factor in patient preference for autograft versus allograft in the treatment of ACL tears. The information sheet was found to be successful at improving participant knowledge. Furthermore, education resulted in a greater number of individuals reporting a preference in graft type (either allograft or autograft) compared to pre-information questioning; however, the majority of individuals indicated they would alter their preference based on surgeon recommendation.