

عنوان مقاله:

?Rotator Cuff Repair With Patch Augmentation: What Do We Know

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Background: Repair of massive rotator cuff tears remains a challenging process with mixed success. There is a growing interest in the use of patches to augment the repair construct and the potential to enhance the strength, healing, and associated clinical outcomes. Such patches may be synthetic, xenograft, or autograft/allograft, and a variety of techniques have been tried to biologically enhance their integration and performance. The materials used are rapidly advancing, as is our understanding of their effects on rotator cuff tissue. This article aims to evaluate what we currently know about patch augmentation through a comprehensive review of the available literature. Methods: We explore the results of existing clinical trials for each graft type, new manufacturing methods, novel techniques for biological enhancement, and the histological and biomechanical impact of patch augmentation. Results: There are promising results in short-term studies, which suggest that patch augmentation has great potential to improve the success rate. In particular, this appears to be true for human dermal allograft, while porcine dermal grafts and some synthetic grafts have also had promising results. Conclusion: However, there remains a need for high-quality, prospective clinical trials directly comparing each type of graft and the effect that they have on the clinical and radiological outcomes of rotator cuff repair. Level of evidence: IV

کلمات کلیدی:

biological enhancement, Extracellular matrix, patch augmentation, Rotator Cuff, Rotator cuff repair, Rotator cuff tear, tissue scaffolds

