Meniscal transplant in children.

Tuca M, Luderowski E, Rodeo S.

Abstract

PURPOSE OF REVIEW:

The purpose is to review and discuss the fundamentals, indications, surgical technique, controversies, and outcomes regarding meniscal transplantation, focusing on available evidence in pediatric populations.

RECENT FINDINGS:

Recent studies have confirmed meniscal allograft transplantation as an effective procedure to improve symptoms, knee function, and quality of life following meniscectomy, particularly in symptomatic young patients. Associated procedures, such as osteotomies and cartilage-related surgeries, have expanded the indications for transplantation. Most patients return to sports following meniscal transplantation, and the procedure does not preclude the potential return to high-level athletic competition. The chondroprotective effect of transplantation has not been proven and as a result the role of prophylactic transplantation remains unclear.

SUMMARY:

Meniscal allograft transplantation is indicated following symptomatic meniscal loss in young, active patients to relieve pain and improve knee function. The quality of the available evidence regarding meniscal transplantation is limited, and no published series to date has focused exclusively on a pediatric population. Further high-quality studies are needed to establish improved indications, timing, and outcomes in a pediatric population.