Meniscus transplantation: indications, techniques, clinical outcomes


Abstract: Although many meniscus tears can be successfully repaired, not all are salvageable, especially if considerable tissue damage has occurred. Meniscus transplantation has been shown to be an acceptable procedure for younger patients. The primary candidate is a patient younger than age 50 years who has had a total meniscectomy and who either has pain in the tibiofemoral compartment, arthroscopic evidence of articular cartilage deterioration, or both. Contraindications are advanced knee joint arthrosis with flattening of the femoral condyle, concavity of the tibial plateau, and osteophytes that prevent anatomic seating of the meniscus allograft; axial malalignment; knee joint instability; knee arthrofibrosis; muscular atrophy; and prior joint infection. prophylactic meniscus transplantation after total meniscectomy is not recommended in asymptomatic patients who do not demonstrate articular cartilage deterioration because long-term predictable success rates are not available. Most clinical studies on meniscus transplantation have reported improvements in knee function and pain, especially in patients who have symptoms affecting daily activities, as there are few if any other available treatment options.