

Table E-1. Summary of the literature that included patients who had an isolated procedure for an articular cartilage defect.

Reference	Patient Population	Preoperative symptoms indicating surgery	Surgery technique	Defect size (area)	Postoperative evaluation	Follow-up Time	Results	Complications/ Comments
Jakob et al. ³⁸	22 of 52 patients with isolated procedure Diagnosis: acute trauma (5); post trauma (16); OCD (13); PF arthrosis (10); PF track (5); DJD (3)	Not stated	Mosaicplasty	Mean, 4.9 cm ² (range, 1.5-16.0 cm ²)	ICRS Grade	Mean, 37 months (range, 24-56)	20/22 improvement in IKDC rating	Related to large surface lesions; difficult to determine if complications listed applied to patients who had an isolated procedure
Hangody et al. ¹⁰	18 of 57 patients had isolated procedure	Pain at the lesion sites—present for an average of 5 months	Mosaicplasty	Range, 1-8.5 cm ²	HSS score	Mean, 48.7 months (range, 36-56)	HSS score: 91.4 points for mosaicplasty versus 87.3 for patients who had concomitant procedures	No complications
Hangody et al. ¹²	20 of 44 patients had isolated procedure	Pain, swelling, locking, stability	Mosaicplasty	2 cm diameter (not area)	HSS score	1-5 years	HSS score: mean, 94 points	Possible this report is a subset of patients in another report by the same author (Hangody et al. ¹⁰)
Wang ³⁷	15 patients (16 knees) Duration of symptoms: mean, 13.6 months (range, 4-40) Some patients had previous procedures of chondroplasty (5), meniscus removal (4), meniscus repair (1), and ACL reconstruction (1) Diagnosis: OCD (5), osteonecrosis (7), traumatic cartilage defect (4)	Pain, giving way, locking, effusion	Mosaicplasty	Medial femoral condyle: mean, 2.0 cm ² (range, 1.2-3.8) Lateral femoral condyle: mean, 4.3 cm ² (range, 1.2-9.0 cm ²)	Functional assessment of pain, giving way, locking, effusion, ROM Lysholm Radiographs for joint space narrowing and degenerative changes	2-4 years	Significant improvement in scores from before to after surgery. No difference in functional results based on diagnosis. Lesions larger than 6.0 cm had poorer results. 2 nd look scope showed mild fissuring and scanty fibrous tissues between grafts	None stated
Brittberg et al. ²¹	23 patients; MFC (16) PAT (7) 10 patients had previously undergone shaving, debridement with no improvement in symptoms	Disabling symptoms of locking, localized pain, swelling, and retropatellar crepitus	Chondrocyte implantation	Mean, 3.1 cm ² (range, 1.6 to 6.5 cm ²)	Excellent = no pain, swelling, locking with strenuous act; good = mild ache with strenuous act but no swelling or locking; fair = moderate pain with strenuous act and occasional swelling but no locking; poor = pain at rest, swelling, and locking	Mean, 39 months (range, 16-66)	MFC: 6 excellent, 8 good, 2 poor Not related to defect size PAT: 1 excellent, 1 good, 3 fair, 2 poor; “disappointing results”	None reported

Minas ³⁹	66 of 169 patients had isolated procedure	History and physical examination correlated to symptomatic chondral lesion	Chondrocyte implantation	Simple lesion (isolated femoral condyle): mean, 4.3 cm ² Complex (multiple defects to the femur or isolated defects to the patella or tibia): mean, 6.75 cm ² Salvage (knees with early arthritic changes): mean, 11.66 cm ²	Knee Society score; Western Ontario and McMaster Universities Osteoarthritis Index; SF-36	12-24 months	Difficult to delineate scores for isolated procedures; Significant improvement from preoperative to postoperative scores for patients without tibial osteotomy	Arthrofibrosis, 5% Periosteal hypertrophy, 20% 22 of 169 had failed result
Peterson et al. ³³	61 patients; 50 patients had isolated procedure: medial femoral condyle (19), osteochondritis dissecans (14); 27 of 56 patients had previous procedures of ACL reconstruction; osteotomy, and meniscectomies	Severe symptoms; pain at rest	Chondrocyte implantation	1.3-12.0 cm ² Medial femoral condyle: mean, 3.4 cm ² (1.6-7.5 cm ²) Osteochondritis dissecans: mean, 4.8 cm ² (range, 1.5-12.0 cm ²)	Cincinnati knee score; Tegner activity; Brittberg clinical grading	7 years	Medial femoral condyle: 12 excellent, 5 good, 2 failures Osteochondritis dissecans: 3 excellent, 9 good, 2 failures Overall finding: 89% good or excellent maintained from 2-7 years	Overall, 10 or 61 failures
Micheli et al. ³⁶	Multi-center prospective cohort—50 patients Some concomitant procedures but article did not state number 39 patients had undergone one or more articular cartilage repair procedures on the affected knee during previous 5 years; 18 failed marrow stimulation procedures	Not stated, but had preop to postop symptom score/activity score	Chondrocyte implantation	Mean, 4.2 cm ² SD, 3.3 cm ²	Modified Cincinnati Knee Rating System (0-10 points; 10 excellent)	36 months	Results not related to age, gender, previous surgery, defect size	11 of 50 patients had reoperation due to symptoms of pain, swelling or catching; 3 graft failures
Ochi et al. ³²	28 knees; 13 isolated procedures	Disabling symptoms of locking, pain, swelling, or retropatellar crepitus	Chondrocyte implantation	Mean, 2.7 cm ² (range, 1.4-4.2 cm ²)	Lysholm score; Arthroscopic grade-ICRS grading: 1-3 pts = severely abnormal 4-7 pts = abnormal 8-11 pts = nearly normal 12 pts = normal	2 years	Mean Lysholm score, 96 pts; ICRS grade (1-12 points): 7 pts = 2 patients 9 pts = 5 patients 11 pts = 2 patients 12 pts = 4 patients	From total group of 28 knees: 3 marked hypertrophy of graft 3 with partial detachment of sutured periosteum 1 partial ossification of graft