

Therapeutic Exercises

Laith M. Jazrawi, MD Associate Professor of Orthopaedics Chief--- Division of Sports Medicine Tel: (646) 501-7223

Rehabilitation Protocol: Autologous Chondrocyte Implantation (ACI (Trochlea/Patella)

Name:	Date:
Diagnosis:	Date of Surgery:
Phase I (Weeks 0-12)
• Weig	ghtbearing:
0	Weeks 0-2: Non-weightbearing
0	TAT 1 0 4 D .: 1 : 1 : 1 : (00 40 H)
0	Weeks 4–8: Continue with partial weightbearing (progress to use of one crutch at weeks 6 8)
0	Weeks 8-12: Progress to full weightbearing with discontinuation of crutch use
 Brac 	ing:
0	Weeks 0-2: Hinged knee brace locked in extension- remove for CPM and rehab with PT
0	Weeks 2-4: Locked in extension for weight bearing – Can open brace for NWB ROM 0-30°
0	Weeks 4-6: Open brace to 30° for ambulation
0	D/C brace at 6 weeks post-op
 Rang 	ge of Motion – Continuous Passive Motion (CPM) Machine for 6-8 hours per day for 1 month
0	Set CPM to 1 cycle per minute – set at 0-30°
0	PROM/AAROM and stretching under guidance of PT
Ther	rapeutic Exercises
0	Weeks 0-4: Straight leg raise/Quad sets, Hamstring isometrics
	Perform exercises in the brace if quad control is inadequate
0	Weeks 4-10: Begin isometric closed chain exercises
	•• At week 6 can start weight shifting activities with operative leg in extension
0	At week 8 can begin balance exercises and stationary bike with lightresistance
0	Weeks 10–12: hamstring strengthening, the raband resistance exercises 0–30°, light openchain knee isometrics
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0	0 /1 1 1
0	Start sport cord lateral drills
• Weig	I I (Months 6-9) ghtbearing: Full weightbearing with a normal gait pattern ge of Motion – Advance to full/painless ROM

o Advance closed chain strengthening/Start unilateral closed chain exercises

o Progress to fast walking and backward walking on treadmill (add incline at 8 months)



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Date:_____

Start light plyamatric training

Signature:

 Phase IV (Months 9-18) Weightbearing: Full weightbearing with a normal gait pattern Range of Motion – Full/Painless ROM Therapeutic Exercises Continue closed chain strengthening exercises and proprioception activities Emphasize single leg loading Sport-specific rehabilitation – jogging/agility training at 9 months Return to impact athletics – 16 months (if pain free)
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 Maintenance program for strength and endurance
Protocol Modifications:
Comments:
Frequency: times per week Duration: weeks