Partial Menisectomy / Chondroplasty Rehabilitation Program

The Gundersen Health System Sports Medicine Partial Menisectomy / Chondroplasty Rehabilitation Program is an evidence-based and soft tissue healing dependent program allowing patients to progress to vocational and sports-related activities as quickly and safely as possible. Individual variations will occur depending on patient response to treatment. Avoid ROM with chondrosis or pain when performing exercises. Please contact us at 1-800-362-9567 ext. 58600 if you have questions or concerns.

Phase I: 0-2 weeks	Immediate post-operative phase
Goals	Minimize knee joint effusion
	Gradually increase ROM per tolerance
	Encourage quadriceps function
	Gradual progression of therapeutic exercises for strengthening, stretching,
	and balance
	Normalization of gait pattern
ROM	• wk 0-1: 0 – 90 degrees
	 wk 1-2: Gradually increase as tolerated. Goal of full ROM by 4-6 wks.
WB	WBAT with use of crutches until attains full knee extension, good quadriceps
	activation and control (QS SLR without a lag), and a normal heel-to-toe
	pattern.
Modalities	Cryotherapy 15 minutes in duration 3x/day
	IFC for pain/effusion if needed
	NMES quadriceps if needed
Treatment	Active warm-up through ROM as tolerated (ie Bike, Nu Step)
Recommendations	Gentle stretching to increase ROM. Emphasis on full return of knee
	extension
	ASAP with gradual improvement for knee flexion ROM based on patient
Guidelines for	tolerance.
progression based	Low-load long duration stretching for extension with heat if needed
on tolerance	(1 st TERT= Total End Range Time)
	Patellar mobilizations
	AROM / AAROM / PROM
	Scar tissue massage
	 Flexibility exercises for hamstring, gastoc-soleus
	Gentle strengthening exercises: Exercise in a pain-free manner. Respect
	patellofemoral joint reaction forces. Initiate functional CKC exercises with
	strengthening from terminal extension to mid-range flexion, respecting
	patellofemoral joint reaction forces which increase with higher knee flexion
	angles during CKC exercises. Initiate gentle sub-max OKC exercises from
	Risfordhock OS SLR CKC knop sytematic
	Multi angle isometrics quadricens/hamstrings at 20 degree increments
	Gentle short arc 0-30 quadriceps with biofeedback (if no chondrosis)
	Hamstring isotonics 0-90
	CKC exercises: weight shifting partial wall squats leg press step-ups
	Hip 4 way SI R, sidelying FR
	Gastroc soleus strengthening
	Balance/proprioception exercises double lea stance progressing to single lea
	CV conditioning, Core stability
	Upper body exercises if desired
	• IFC for pain/effusion, NMES for guadriceps activation and control as needed
	Ice (in stretch for extension if needed) 2 nd TERT



HEP for 3 rd TERT

Phase II: 2-4 weeks	Minimal protective phase
Goals	Minimize knee joint effusion
	Return of full range of motion
	Improve muscle strength and endurance
	Progression of therapeutic exercises for strengthening, stretching, and
	balance
ROM	 Gradually progression to with goal of full ROM by wks 4-6
WB	No limitations. Work on normalization of gait pattern if not already achieved.
Modalities	Cryotherapy 15 minutes in duration 1-2x/day
	IFC for pain/effusion if needed
	NMES quadriceps if needed
Treatment	Active warm-up: Bike, Elliptical Runner, Nu Step, Treadmill walking
Recommendations	Stretching for full ROM
	Low-load long duration stretching with heat if needed
Cuidalinas for	(1 st IERI= Iotal End Range Time)
Duluelines IUI	Patellar mobilizations
hased on tolerance	AROW / AAROW / PROW
	 Scal lissue massage Elevibility eversions for hometring, gester colour.
	 Flexibility exercises for hardware exercises: Exercise in a pain free manner.
	• Strengthening and endulative exercises. Exercise in a pain-free manner.
	reaction forces which increases with knee flexion angles during CKC
	exercises increases with terminal extension angles with OKC exercises
	Incorporate total leg strengthening. Incorporate functional strengthening.
	Biofeedback QS, SLR, CKC knee extension
	Quadriceps OKC isotonics short arc with progression to full ROM (if no
	chondrosis)
	Hamstring isotonics 0-90 degrees
	CKC exercises: Progress from mid ROM to full ROM – leg press,
	multi-
	directional step-ups, lateral step-overs, partial multi-directional
	lunges (wk 2) progress progress to full lunges (wk 3), sidestep
	With
	Lin 4 wey SLD eidelye ED
	Castroc solous overcises
	Total leg strengthening
	Furoalide (wk 3)
	Balance/proprioception: single leg stance activities
	CV conditioning. Core stability
	• Ice (in stretch if needed) 2 nd TERT
	• HEP for 3 rd TERT if needed
	HEP for 3 rd TERT if needed



Phase III 4+weeks	Return to activity phase	
Goals	 Progress muscle strength, endurance, and balance activities 	
	 Progress to higher level activities depending on functional demands and MD 	
	approval	
	 Return back to vocational, recreational, and sport activities 	
Modalities	 Cryotherapy 15 minutes 1x/day or after strenuous activity 	
Treatment	 Active warm-up: Bike, Elliptical Runner, Nu Step, Treadmill walking 	
Recommendations	Continue with stretching and flexibility exercises as needed	
	 Strengthening and endurance exercises: Advance as tolerated with 	
	emphasis on functional strengthening	
	Total leg strengthening	
	Hip strengthening	
	Heel raises	
	Hamstring full ROM isotonics	
	Quadriceps isotonics in ROM without chondrosis	
	Isokinetic quadriceps/hamstrings in ROM without chondrosis	
	CKC exercises: Leg press, multi-directional lunges and step-ups, squats, sideshuffle with T-band,	
	Gastroc soleus strengthening	
	Stairmaster, Euroglide	
	Dynamic balance exercises	
	 Impact activities if 75% strength on CKC testing: sub-max agility drills 	
	progressing to full intensity agility drills, running program, plyometrics	
	 Sports-specific activities 	
	CV conditioning and core stability	
Testing at 4-6 weeks	Linea CKC testing	
	 Biodex knee flex/ext 0-90 if indicated 	

Function	al testing when appropriate
Return to sport/ work guidelines• Based o effusion compare performa • Anticipa	n MD approval, minimal pain at rest or with activity, no knee joint full pain-free ROM, isokinetic strength and functional testing at 90 % ed to uninvolved side, good performance on functional testing (90% ed to normative data or contralateral extremity) and adequate ance on sport-specific drills ted return to full activity between 5-6 weeks



Partial Menisectomy References

- Davies GJ, Heiderscheit B, Clark M. Open kinetic chain assessment and rehabilitation. Athletic Training: Sports health care perspectives, 1995; 1(4): 347-370
- Davies GJ, Zillmer DA: Functional progression of exercise during rehabilitation in Knee Ligament Rehabilitation, Ellenbecker, 2000; 345-360
- McClure PW, Blackburn LG, Dusold C. The use of splints in the treatment of joint stiffness: biological rational and algorithm for making clinical decisions. Physical Therapy, 1994; 74: , 1101-1107
- Sapega AA, Quedenfeld TC. Biophysical factors in range of motion exercises. Physician and Sports Medicine, 1981; 9: 57-65
- Straker JS, Johnson-Stuhr P: Clinical application of closed kinetic chain exercises in the lower extremities. Orthopaedic Physical Therapy Clinics of North America, 2000; 9(2): 185-207

Tyler TF, Nicholas SJ, Seneviratne AM. Meniscal surgery rehabiliation. In Manske RC,editor: Postsurgical

Orthopedic Sports Rehabilitation Knee and Shoulder, 2006.

