

Dr. Troy Berg, Dr. Brent Carlson

ACL REHAB PROTOCOL

Patient\_\_\_\_\_

Chippewa Valley Orthopedics & Sports Medicine

DOS\_\_\_\_\_

4212 Southtowne Drive 757 Lakeland Drive, Suite B  
 Eau Claire, WI 54701 Chippewa Falls, WI 54729

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	MONTH 3	
<b>WEIGHT BEARING</b>	Begins DOS 0%	5%	5%	25%- 50%	50%-75%	75%-100%	100%	D/C crutches	Decrease frequency as tolerated. Continue with all exercises for strength, endurance, and proprioception. <b>MONTH 4-5</b> Functional Brace as per MD for work and high level functional activities. 70% quad Strength and no pain. Begin progressive running program. Progress agility as tolerated. Initiate jumping program with brace. <b>Month 6</b> Brace for activity. Quad and Ham strength should be 90 %. Pass functional tests. Full jumping, plyometric program.	
<b>BRACE SETTINGS</b>	0/0	0/0	0/30	0/60	0/90	0/120	0/120	D/C brace		
<b>PROM Goals</b>	0-90	0-90	0-100	0-120	0-140	FULL	FULL	FULL		
<b>AROM Goals</b> Via Heelslide	NONE	0-40	0-75	0-90	0-120	0-140	FULL	FULL		
<b>PT visits/wk</b>	NONE	2-3	2-3	2-3	2-3	2-3	2-3	2-3		
<b>SHOWER</b>	NO	WITH BRACE	W/O BRACE			Sleep w/o brace per MD				
<b>Avoid Deep Squats and Kneeling for 4-5 months. No squatting deeper than 90° after meniscus repair.</b>	Quad Sets	Quad Sets	Quad Sets	Knee extension OKC 90-40° initiate AA or AROM single leg						
	SLR's w/brace	SLR's w/brace	SLR's no brace							
	<b>NOTE:</b>	Patellar Mobs								
		Multi-hip Isotonics								
		*PT visits/wk may vary *Individual ex progression may vary		Ham Curls ACT or A/Assist	Ham Curls isotonic/2 legs					
				Closed Kinetic Chain Exercises TKE with over-ball press, tubing, mini-squats (0-30)						
				Hamstring Stretch	Heel Raises Total Gym partial squats per WB & ROM guidelines					
	*Fast and slow healers will need modifications. Please refer to MD. Refrain from forceful pushing for ROM.			Contact Dr. Berg if knee is stiff, may start riding bike early.				Bike		
				BAPS						
				Leg press (double leg.....progress to single leg)						
							Treadmill Walking			
			Dynamic Balance Exercises Double leg to single leg							
Any Questions? Please contact: <b>NORTHWOODS THERAPY ASSOCIATES</b> Eau Claire, WI Chippewa Falls, WI 715-839-9266 715-723-5060						Resisted Ambulation	Advance Open/closed Chain activity			
						Stairmaster	Swimming			
						Elliptical	Light agility at walking speed.			
November 2010										

Dr. Berg's and Dr. Carlson's protocol is based on a criterion-based rehab philosophy developed with Lonnie Paulos, M.D. The numbers and information on the opposite side are a guideline, but at times will be modified based on patient characteristics. In general, the goals and time frame of Phase I must be completed before progressing to Phase II, etc.

The rehab paradox is that a "slow healer" will make rapid progress and regain motion with little effort. Conversely a "fast healer" will form abundant scar tissue and will make slow progress. This occurs because a "slow healer" does not form an appropriate amount of healing/scar tissue and therefore needs to have their rehab slowed down. Conversely, a "fast healer" forms abundant scar tissue and needs to have the rehab accelerated. They may also need NSAID's or Medrol. The intent of the protocol is to reproducibly tailor the rehab process to each individual, and to identify, and appropriately treat abnormal healers, whether slow or fast.

### **Phase I (Week 0-8)**

Exercises listed on opposite side

Patellar mobs

Modalities as needed

#### **Criteria to advance to Phase II**

Knee flexion to 110 degrees

SLR with no extension lag

Full passive extension

Minimal swelling and pain

Improving patellar mobility

### **Phase II (Week 8-16)**

Off crutches

Increasing flexion as fast as tolerated

Move to PRE's

Phase into independent HEP and check every 1-2 weeks

#### **Criteria to advance to Phase III**

Near normal ROM

No swelling

No pain with extension

### **Phase III**

As months 4-6 come up, this will be highly variable to what they need to return to work, school or recreation. It is a transition on an as tolerated basis. Open chain activities, along with plyometrics, progressive running, full weight lifting and advanced balance exercises should be initiated and implemented to their HEP.

#### **Criteria for return to sport/work/recreation**

Quad and Hamstrings at 90%

Passing of functional testing (PT use one you are familiar with)

Functional Bracing if needed