



Indiana University Health

IU Health Physicians Orthopedics & Sports Medicine

ARTHROSCOPIC / OPEN OSTEOCHONDRITIS DISSECANS (OCD) FIXATION

PHYSICAL THERAPY PROTOCOL

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Patient Name: _____ **Date of Surgery:** _____

Procedure(s): **Right/Left Knee Arthroscopy**
 OCD repair

Accessory Procedure (circled if applicable):

OATS
Bone graft harvest (tibia, ICBG)



Osteotomy (DFO, HTO, or AMZ)

__ Evaluate and Treat – no open chain or isokinetic exercises

__ Provide patient with home exercise program

Frequency: _____x/week x _____weeks

__ Phase I (Weeks 0-8 to 10)***: *Period of protection. NWB with crutches until after hardware is removed (2nd operation). Progress ROM as tolerated.*

◆**Non-weight bearing with crutches.** Hinged knee brace should be worn at all times except during PT and for hygiene. Brace should be locked in extension when not ambulating or performing PT. For patients without CPM at night, brace should be locked in extension while sleeping.

◆**ROM:** Progress through passive, active and active-assisted ROM as tolerated

- Goal: Full extension by 2 weeks, 130 degrees of flexion by 6 weeks

◆**Patellar mobilization** as tolerated.

◆**Strengthening:** quad sets, SLRs (with brace locked in extension), heel slides, etc.. Ankle/hip strengthening as tolerated.

****In some situations, a CPM device will be ordered for home use: 6-8 hours per day (usually at night) x 6 weeks; start at 0-40 degrees (1 cycle/minute), progressing 5-10 degrees daily as tolerated (goal 120 degrees or greater by week 6). For those without CPM, the brace should be locked in extension during sleep.*

^^^^METAL SCREWS REMOVED AT 8-10 WEEKS (DEPENDING ON SIZE, LOCATION, AND FIXATION QUALITY) ^^^^^

__ Phase II (8-12 wks): **Following Hardware Removal**

- **Goals**
 - Normalize gait, avoid overstressing the fixation site
- **Weightbearing/Brace:**
 - 8-10 Weeks: Increase weightbearing 25%/week as tolerated (WBAT) in brace, locked in extension



- 10-12 Weeks: Further increase weightbearing 25%/week as tolerated (WBAT) in brace, unlocked and discontinued when quadriceps strength is regained
- **ROM:** Full without limitations
- **Therapeutic exercises (all NWB):**
 - 8-10 Weeks:
 - Advance Phase I exercises
 - Can start weight shifting activities with operative leg in extension
 - Begin balance exercises and stationary bike with light resistance
 - 10-12 Weeks:
 - Gait training, begin closed chain activities (wall sits, mini-squats, toe raises, hip/core strengthening)
 - Closed chain leg control for non-impact movement and positions of quads and glutes – double leg squat progressions and leg press (0-60° ROM and respect weightbearing point of OCD as a component of progression)
 - Begin unilateral stance activities, balance training, hamstring strengthening, theraband resistance exercises 0-30°, light open-chain knee isometrics
 - Stationary bike with low resistance
 - Aquatic therapy – repeated knee motions such as march walking and bicycle walking

Phase III (3-6 months):

- **Weightbearing:** As tolerated without bracing
- **ROM:** Full without limitations
- **Therapeutic exercises:**
 - Advance Phase II exercises
 - Gait training / treadmill use at slow-moderate pace
 - Progress balance / proprioception exercises
 - Maximize core/glutes, pelvic stability work, eccentric hamstrings
 - Advanced to elliptical and pool as tolerated; stationary bike with moderate resistance, deep water running and swimming
 - Single leg balance exercises and progression
 - Closed-chain strengthening for quads and glutes – lung progression and single leg squat progressions
 - Core and strength stabilization
 - 4 months: Straight running on treadmill, progress to agility exercises, elliptical
 - 5 months: Initiate low amplitude landing mechanics (med ball squat catches, shallow jump landings, chop and drop stops, etc.)

Phase IV (6+ months):

- **Weightbearing:** As tolerated without bracing, normal gait pattern
- **ROM:** Full without limitations
- **Therapeutic exercises (all NWB):**



- Advance functional activity. Post-exercise soreness should resolve within 24 hours
- Advance closed chain strengthening
- Progressive agility drills (forward and backward skipping, side shuffle, skater's quick stepping, backward jog); landing mechanics (progressing from higher amplitude double leg to single leg landing drills)
- Progress to fast walking and backward walking on treadmill (add incline at 8 months)
- Start / advance plyometric training
- Strength and control drills related to sport-specific movements
- Continue closed chain strengthening exercises and proprioception activities
- Return to sports typically at 6-8 months

___ **Other:**

___ Modalities

___ Heat before/after

___ Electrical Stimulation

___ Ice before/after exercise

___ Ultrasound

By signing this referral, I certify that I have examined this patient and physical therapy is medically necessary. This patient ___ would ___ would not benefit from social services.

Date: _____

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