



Advanced Orthopedic Specialists, P.C.

Laith A. Farjo, M.D.

2305 Genoa Business Park, Suite 170

Brighton, MI 48114

Phone: 810.299.8550 Fax: 810.844.0837

www.advancedortho.net

Osteochondral Grafting (COR) Rehabilitation Protocol

0-2 Weeks

- ❖ **Weightbearing Status:**
 - Non-Weightbearing using two crutches
- ❖ **Range-of-Motion and Stretching Exercises:**
 - Passive knee flexion and knee extension range-of-motion
 - Wall slides or heel slides to increase knee flexion range-of-motion
 - Gels slides and passive knee extension with heel supported to increase extension ROM
 - Stationary bicycle with minimum resistance, if range-of-motion allows
- ❖ **Mobilization:**
 - Patellar mobilization as needed
- ❖ **Stretching Exercises:**
 - Hamstring, iliotibial band, and calf stretches, as needed
- ❖ **Strengthening Exercises:**
 - Isometric quadriceps sets
 - Isometric hamstring sets at 70-90 degrees of knee flexion
 - Straight leg raises
 - Hip adduction
 - Ankle plantar flexion with tubing resistance

2-4 Weeks

- ❖ **Weightbearing Status:**
 - Partial weightbearing:
 - 2 - 3 weeks 25% body weight
 - 3 - 4 weeks 50% body weight
- ❖ **Range-of-Motion and Stretching Exercises**
 - Continue knee extension range-of-motion exercises, as needed
 - Discontinue wall slides at 115-120 degrees flexion, progressing to heel slides
- ❖ **Strengthening Exercises:**

- Progress with strengthening exercises as above
- Active knee extension
- Hamstring curls
- Seated toe raises with resistance
- Pool exercises, if available
- Gradually increase resistance on stationary bicycle

4-6 Weeks

- ❖ **Weightbearing Status**
 - Advance to full weightbearing:
 - 4-5 weeks 75% body weight
 - 5-6 weeks 100% body weight
- ❖ **Range-of-Motion and Stretching Exercises:**
 - Continue above exercises, as needed
 - Full knee flexion and extension range-of-motion by 4-6 weeks past surgery
- ❖ **Strengthening Exercises**
 - Progress with strengthening exercises, as above
 - Hip abduction, added during the fourth to fifth week, if fair quadriceps contraction is present

6-8 Weeks

- ❖ **Weightbearing Status:**
 - Progress to full weightbearing. without assistive device, by six weeks post surgery
- ❖ **Strengthening Exercises**
 - Closed Kinetic Chain
 - Standing toe raises
 - Partial squats
 - Leg press exercise
 - Step exercises; step-down, step-up, lateral stepping
 - Open Kinetic Chain
 - Isokinetic training. 200+ speed

8-12 Weeks

- ❖ **Functional Exercises:**
 - Treadmill walking, progressing to an uphill grade of 2-3%
 - Stepper machine (e.g.. Stairmaster, Climbmax)