Goshen Physicians

ORTHOPEDICS & SPORTS MEDICINE

Fulkerson Osteotomy Protocol

Recommendations

- PROM: 0 - 90^{O} x 4 weeks.
- No AROM x 4 weeks.
- NWB x 4 weeks.
- Wear brace (if applicable) for 6 weeks (0 - 90^{O}).
- No driving for 6 weeks.
- Ice 3 - 4 times daily for the first week and then as needed thereafter for pain and swelling.
- Return to sport and/or work to be determined by the physician.
- **If the Fulkerson Osteotomy (distal realignment) procedure is performed in combination with a proximal realignment procedure, follow a modified Fulkerson Osteotomy Protocol as follows:**
- **0 - 45^{O} x 4 weeks**
- **NWB x 6 weeks**
- **Discontinue brace by 8 weeks**
- **Delay the Fulkerson Osteotomy Protocol by approximately 2 weeks.**

0 - 4 weeks

- 0 - 90^{O} x 4 weeks.
- NWB x 4 weeks.
- No AROM x 4 weeks.
- Use Bledsoe brace (if applicable) (0 - 90^{O}) for external support and compression wrap with horseshoe pad for effusion control.

1. Submaximal isometrics - adductors, glute's, abductors, hamstrings.
2. Quad sets.
3. A/RROM of ankle.
4. Patella mobilizations.
5. Stretching - hamstrings, gastroc-soleus, iliotibial band (NWB).
6. Electrical stimulation and/or biofeedback for quadriceps and hamstrings.

7. Modalities to minimize effusion.

4 - 6 Weeks

- Begin PWB at 4 weeks (FWB by 6 weeks).
- Begin AROM.

1. Initiate SLR's all planes without weight.
2. Multi-hip machine with pad proximal to knee.
3. PROM to tolerance- with hip flexed and extended.
4. Bike for ROM only.
5. Weight shifting in a squat and anterior lunge position (>30^{O} knee flexion).
6. Modalities for continued control of effusion and edema.
7. Begin aggressive patellar mobilizations and scar tissue massage.
8. Consider aquatic therapy at this time.
9. Add seated heel raises. Progress to standing position as weight bearing status improves.
10. Begin submaximal knee extension isometrics (60 – 90^{O}).
11. Add hamstring curl machine.

6 - 8 Weeks

- Wean from brace at 6 weeks as quad control improves.
- Begin RROM.
- **P/AROM equal, bilaterally, by 8 weeks.**

1. Continue SLR's.
2. Begin static single-leg balance on floor. Progress to dynamic singleleg balance activities (e.g. upper or lower extremity reaching, 4-way theraband, BAPS, etc.) as lower extremity muscle control allows.
3. Continue with bike. May begin exercise program if effusion is controlled.
4. Begin retroambulation.
5. Add leg press.
6. Initiate isometric squats and progress to dynamic squats emphasizing lower ranges (e.g. 60-90^{O}) and proper technique.*****
7. Begin closed kinetic chain terminal knee extensions (CKC TKE) with theraband resistance.
8. Initiate knee extension isotonics (30-90^{O}) as tolerated.***** 9. Begin hip hiking.

8 - 12 Weeks

 Emphasize concepts of frequency, duration and intensity of training. **Equal strength, bilaterally, by 12 weeks.***

 Consider orthotics, taping , bracing, etc. as appropriate to facilitate training and proper biomechanics .

1. Begin lateral step-ups/downs beginning at 2” and progressing height only if proper technique is maintained (e.g. no hip substitution).
2. Progress to lunges (e.g. anterior, lateral, etc.) as tolerated.

3. Add Sportcord activities (e.g. marching, lateral stepping in squat position, lunging, etc.)
4. Progress knee extension isotonics. May progress to $0 – 90^{O}$ arc as tolerated.*
5. Progress endurance training (e.g. bike, Versa Climber, etc.) with emphasis on high RPM's to minimize patellofemoral compression.
6. Progress static and dynamic single-leg balance activities to unsteady surfaces (e.g. pillow, half foam roll, BAPS board, etc.) as lower extremity muscle control allows.
7. Begin mini-tramp marching.

12 Weeks +

- Progress to independent home exercise program.
- Emphasize importance of proper lower extremity biomechanics. **DO NOT LET RESISTANCE DICTATE TECHNIQUE !!!**

1. Begin sport- and/or work-specific activities.
2. Initiate mini-tramp jogging.
3. Begin return to running program (e.g. treadmill, road, etc.) as appropriate.
4. Begin fitter and/or slide board.
5. Initiate plyometrics as appropriate.

***May vary depending on the presence, degree and location of DJD.**