Dr. Brad Bushnell Harbin Clinic Orthopaedics and Sports Medicine ACL Reconstruction with Meniscus Repair Post Operative Protocol

Phase I - Maximum Protection (Weeks 0 to 4):

- Brace six weeks locked in extension for 4-6 weeks (per physicians orders)
- Use crutches weight 50% bearing x 2 weeks; WBAT after 2 weeks Goals
 - Reduce inflammation
 - Normalize patella mobility with manual mobilizations
 - full extension
 - 90° of knee flexion limitation x 2-4 weeks (per physicians orders)

Exercise progression

- Quadriceps setting using NMES as needed
- Multi-plane straight leg raising
- Open and closed chain multi-plane hip strengthening after FWB
- Core strengthening
- Proprioception drills
- Gait training
- Deep water pool program with 90° limit once incisions are healed

Phase II - Progressive Stretching and Early Strengthening (Weeks 4 to 6):

Goals

- Reduce inflammation
- Full knee extension/hyperextension
- Knee flexion gradually progressing to full

Exercise progression

- Multi-plane open and closed kinetic chain hip strengthening
- Stationary biking
- Proprioception drills

Phase III - Advanced Strengthening and Endurance Training (Weeks 6 to 12):

Weeks 6 to 10:

<u>Goals</u>

- Full knee flexion and extension
- Progressive strengthening
- Increase muscular endurance

Exercise progression

- Leg press, squats (above 90°)
- hamstrings curls
- Increase intensity of stationary bike program, treadmill walking and elliptical
- Advance intensity of deep water pool program; focus on endurance training

Weeks 10 to 12:

Exercise progression

- Outdoor biking
- Lunge progression (retro, walk and split) as indicated
- Controlled movement series
- Lateral lunge progression
- Swimming free style
- Forward/backward elevated treadmill walking

Phase IV - Advance Strengthening and Running progression (Weeks 12 to 24):

Exercise progression – weeks 12-20

- Progress resistance with squat and lunge strengthening program, may add leg extensions at 30° - 0° (exclude patients with patellar or trochlear groove chondral pathology)
- Shallow water pool running progression week 12
- Basic ladder series week 12
- Linear running progression week 16
- Basic plyometric box progression week 16
- Fit functional brace –week 16

Return to Sport and Functional Drills Phase (Weeks 20 to 24)

- Interval golf program
- Advance ladder, hurdle and plyo box progressions
- Sport specific field/court drills with brace on
- Non-contact drills

Sports test and follow-up with physician

- Follow-up examination with the physician
- Sports test for return to competition at 6 months