Tibia and Femur Autologous Chondroctye Transplantation PT Protocol (#8)
Stage 2- Transitional Phase (7-12 weeks)

PRIMARY GOALS
DO NOT OVERLOAD GRAFT
INCREASE TIBIAL-FEMORAL AND PATELLA-FEMORAL MOBILITY
RESTORE QUADRICEPS CONTROL

BRACE
- Unloading brace to be warn at all times for at least 6-9 months after surgery

GAIT
- Use bathroom scale to progress as follows:
  - Weeks 7 & 8  PWB 1/3 Body Weight
  - Weeks 9 & 10  PWB 2/3 Body Weight
  - Weeks 11 & 12  FWB with crutches
  - Week 13+  Crutch, Cane, or No Device as tolerated
  * Progress per guidelines above as pain allows

ROM
- Continue full AROM and gentle AAROM
- CPM may be discontinued

THEREX
- Low weight (max 10-20lbs.) open-chain leg extension and curl
- Continue quad sets, SLR in brace, leg curl and heel slides
- Strengthen quadriceps, hamstrings, and hip abductors/extensors using ankle weights and/or elastic band resistance through full ROM as tolerated
- Stationary bicycle using unloading brace with low resistance as tolerated
- Gentle closed-chain terminal knee extension 0-40 degrees (TKE) permitted starting at 9-10 weeks as tolerated per weight bearing restriction

THERAPY
- Continue gentle multi-directional patella mobilization as needed
- Whirlpool or pool therapy as available to enhance ROM and quadriceps/hamstring muscle control.
- E-stim for VMO/quadriceps muscle re-education/biofeedback as needed
- Gentle massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar regions.

COMMENTS
- Activity level should be modified if increased pain, catching, or swelling occurs.
- No progression of this protocol until cleared by M.D at 12 weeks post-op.