

Dr Craig Chike Akoh, M.D.
NONOPERATIVE ACL TEAR REHABILITATION PROTOCOL

| | WEIGHT BEARING | BRACE | FOCUS | ROM | EXERCISES | PRECAUTIONS |
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| <i>PHASE I</i> Acute Phase | *WBAT with crutches and progress to FWB and d/c crutches when patient can demonstrate normal gait mechanic | Functional knee brace unlocked | *Control pain and swelling *Restore pain free ROM *Restore normal gait mechanics *Establish good quadriceps activation | *Emphasize knee extension equal to contralateral limb *Goal is to achieve full flexion | -Quad/Add sets, SLR (no lag), hip -Abd/Add/Ext/ER, partial range squats, standing TKE, standing or prone hamstring curl, heel raises | *Minimize joint effusion and edema *Alert physician if patient reports episodes of knee buckling |
| <i>PHASE II</i> Sub-Acute Phase | FWB | Functional knee brace unlocked | *Maintain ROM and flexibility *Progress strengthening *Improve neuromuscular control | *Maintain full ROM and optimize LE flexibility | Continue Phase 1 strengthening, leg press, leg curl machine, step-ups, squats, plank series, single-limb balance Single-limb balance exercises | *Minimize joint effusion and edema *Alert physician if patient reports episodes of knee buckling *Avoid patella femoral joint stress |
| <i>PHASE III</i> Limited return to sports | FWB Straight ahead jogging per physician approval | Functional knee brace unlocked | *Maintain ROM and flexibility *Maximize strength, initiate single leg exercises *Maximize neuromuscular control *Initiate plyometrics and light jogging *Initiate return to sport/work activities with physician approval | *Maintain full ROM and optimize LE flexibility | -Bicycle/elliptical/treadmill with progressive resistance -Progress Phase 2 strengthening, step-up progressions, single-limb dead lifts, static lunges -Single-limb balance with perturbations -Double-limb simple and complex plyometrics | *Alert physician if patient reports episodes of knee buckling *Avoid patella femoral joint stress especially with plyometrics *Monitor increased knee effusion with plyometrics *Caution pivoting or lateral movements *Not cleared to return sports |
| <i>PHASE IV</i> Return to sports | Full | Functional knee brace as needed | * Maintain ROM, flexibility, and strength *Continue dynamic strengthening and proprioceptive exercises | *Continue daily LE stretching I | -Continue daily stretch -Bicycle/elliptical/treadmill with progressive Resistance -Progress Phase 3 strengthening, increase load and decrease repetitions | *Alert physician if patient reports episodes of knee buckling *Avoid patella femoral joint stress especially with plyometrics |

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| | | | <ul style="list-style-type: none">*Continue plyometrics and initiate agility training*Progress sport specific drills | | <ul style="list-style-type: none">-Progress Phase 3 proprioceptive training increasing difficulty of drills-Begin single-limb plyometrics, advance double-limb and single-limb combination jumps-Begin speed and agility program | <ul style="list-style-type: none">*Monitor increased knee effusion with plyometrics*Caution pivoting or lateral movements*Cleared for return to sport per physician |
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