

## **Medial Collateral Ligament (MCL) Non-Operative Rehabilitation Protocol**

### **Grade I Injuries:**

- WBAT with crutches if necessary
- May use small brace with hinge for support if necessary
- Active ROM exercises to achieve full ROM as tolerated
- Active strengthening exercises—open and closed chain as tolerated
- Progress agility, proprioceptive and sport specific drills as tolerated
- Return to sports when motion, strength, agility and proprioception are equal

### **Grade II Injuries:**

- Long-leg brace with WBAT with crutches
- Brace may be locked 1-2 weeks depending on pain, alignment and opening.
- Active ROM exercises started immediately in brace (if opened) or out of brace if locked in extension
- E-stim, quad sets, SLR started immediately
- Brace is opened by end of post injury week 3 and FWB encouraged.
- Discontinuation of brace is dependent on pain, alignment and laxity.
- Week 3: Bike and progressive resistive exercises instituted as tolerated. Avoid exercises that place valgus force on knee and open chain exercises for 6 weeks.
- Week 4: Once full ROM and functional strength attained, agility and proprioceptive drills may begin, including straight line running.
- Week 5-6: Progress to sprinting and sports specific functional agility drills as tolerated.
- Return to sports when motion, strength, and proprioception are equal, can perform sports specific activities and valgus opening eliminated pending physician's exam. This is generally between 5 and 6 weeks post injury.
- Bracing is encouraged for contact sports or high risk sports to prevent valgus forces

### **Grade III Injuries:**

- Long leg brace locked in extension for 3-6 weeks depending on alignment. NWB for 3 weeks if significant valgus alignment. TTWB otherwise.
- Immediate ROM out of brace 2-3 times a day for non-valgus alignment patients. Brace unlocked at 3 weeks and progressive weight bearing in patients with non-valgus alignment.
- ROM after 3 wk in patients with valgus alignment. Brace locked for 6 weeks for ambulation with weight bearing depending on degree of laxity.
- Quad sets, SLR, E stim started immediately.
- Closed chain exercises started depending upon patient's weight bearing status.
- Progressive ROM and strengthening similar to patients with grade II injuries.
- Bracing is encouraged for all sports for 6-12 months.