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MICROFRACTURE Clinical Protocol

PHASE 1

Week 0 – 2

- Brace to be worn 0-8 weeks and set at 0-20 degrees
- ROM
 - Patellar mobilization – mobilize in each direction. Hold for 2 seconds and repeat 10 times. Performed three/day.
 - Passive extension on bolster – hold stretch 1-5 minutes, rest 30-60 seconds, repeat 3-5 times consecutively, perform 3 sessions per day
 - Prone hangs – use opposite foot to passively straighten knee. Repeat as above
 - ROM wall slides – 25 times three times per day
 - Heel slides (assisted) – 25 times three times per day
 - Seated knee flexion – hold stretch 5-10 seconds for 10-20 repetitions. Repeat three times per day.
- Strengthening
 - Quad sets – hold for 10 seconds, relax for 5. 5 minutes.
 - Hamstring sets – as above.
 - Standing leg lifts vs. Supine straight leg raises – all direction. Hold for 2 seconds and repeat 10 times.
 - Mini squats (0-30 degrees) – 2-3 sets of 10-15. ONLY if partial weight bearing. DO NOT perform if patient has NWB instructions.
 - Heel raises – 2-3 sets of 10-15.
- Stationary Bike
 - Well leg cycling
- Modalities - ice
- Trunk
 - Drawing in, crunch, diagonal crunch, prone trunk extension
- HEP
 - Ottoman hangs
 - Prone hangs
 - Heel slides
 - Wall slides
 - Self patellar mobilization
 - Quad sets
 - Hamstring sets
 - Standing or supine SLR's
 - Mini squats (if WBAT)
 - Heel raises (if WBAT)

Week 2 – 8

- ROM
 - As previous
 - Calf and hamstring stretching
- Strengthening
 - As previous
- Pool
 - Aqua jogger – deep well cycling, aqua jacks
- Stationary Bike
 - Spin or light resistance

Week 8 – 12

- Continue above program
- Strengthening
 - Add resistance band
 - Mini squats
 - Seated hamstring curls
 - Seated leg press
 - Sport cord – forward and backward walking
- Stationary Bike
 - Increase endurance
- Pool
 - Add free-style swimming
 - Fins
 - Kickboard

Week 12 – 16

- ROM
 - Continue ROM and flexibility program
- Strengthening
 - Resistance cord
 - Continue previous program
 - Single leg squat
 - Sport cord – forward and backward jog
- Stationary Bike
 - Progress endurance and resistance
- Pool
 - As previous
- Free-weight / Machines
 - Shuttle
 - Cable abduction/adduction
 - Calf press
 - Hamstring curl

Week 16 – 24

- Continue above program
- Strengthening
 - As previous – progress intensity as tolerated.

- Lateral agility
- Free-weight / Machine
 - Add squats
- Agility drills / sport specific drills – begin at 50% and progress as tolerated

6 - 9 Months

- Interval sport programs