Micro-Fracture / Cartilage grafting Alan Reznik, MD MBA FAAOS - Connecticut Orthopaedics

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Objective – In those cases where the defect is larger or on a weightbearing surface to protect the early cartilage healing and then allow it to mature.

* Note: the protocol is different depending on what was done.

Protocol 1: Simple Microfracture

Those patients with very small defects or defects in the trochlear grove can be partial weight bearing on two crutches for the first week, then increase weight bearing as tolerated. They do not need a knee immobilizer. They are to avoid squats, leg press, and impact exercises for at least six weeks post op. No running or jumping for 3-4 months post op.

First 3-4 weeks quad sets, patella mobs, leg lifts, ankle pumps and home general seated upper extremity exercises to prevent deconditioning.

E-stim for quads- check superior patella glide

Bike for range of motion starting week 3

When ready to increase weight add leg lifts with weight placed above the knee Partial squats, with ball behind back against the wall, without weights starting week 4 Advance weightbearing as tolerated. May continue with crutches until week four, only if symptoms persist

Increase bike for exercise

After week six: Add one leg biking, to wakeup quads on surgery side and Start balance training

Protocol 2: Microfracture/cartilage graft

Those patients with bigger defects in the medial or lateral knee or cartilage GRAFTING, will be in a knee immobilizer (and that is the tip-off that they need to follow a more restrictive protocol). They are to use the knee immobilizer for 3-4 weeks pending when the swelling decreases enough to be changed to an unloader brace. The brace would be a medial unloader for those patients with medial defects, lateral unloader for lateral defects and a knee hinge brace for defects on both sides of the knee.

First 3-4 weeks quad sets, patella mobs, leg lifts, ankle pumps and home general seated upper extremity exercises to prevent deconditioning.

Leg lifts with weigh placed above the knee

E-stim for quads- check superior patella glide

Bike for range of motion starting week 3

Partial squats with ball behind back against the wall without weights starting week 3

Week 6 Increase Bike for exercise

Add on leg biking for wakeup quads

Start balance training with brace on after week 8

Use unloader brace until 4 months post op for weight bearing activity.