KneePro

Sports Knee Rehabilitation

REHABILITATION GUIDELINES FOLLOWING MICROFRACTURE / CHONDRAL GRAFTING

The most common areas of microfracture are the trochlear and femoral condyle. Guidelines will vary depending on the area of the microfracture for example hinge position post op and WB status. The post op notes should be adhered to.

Ensure patient achieves milestone prior to progression
Return to contact sports approximately 20 weeks post-op
Return to gentle non-contact, non-competitive sports at physiotherapist's discretion but must be over 16 weeks post-op

WEEK	RANGE OF MOVEMENT	MOBILITY	TREATMENT	MILESTONE TO PROGRESS
Day of surgery	Locked hinge brace set at 0 degrees to 30 degrees.	As per area microfractured **Femoral condyle** - touch weight bearing with crutches Weight bear to comfort if **trochlear** microfracture	• Use of ice and elevation • Ensure adequate pain relief • Apply CPM in recovery • Teach **passive** ROM exs to commence day following surgery • Static quads • SLR • Circulatory exercises	• No post-operative complications • Independent mobility with elbow crutches (EC) • Good understanding of home exercise programme
Week 1-4	Hinge position to be decided dependent on position of microfracture, to be documented on the op note. If no documentation – **Femoral condyle** no limit to passive ROM. No active quads/hams through range.	**Femoral condyle** - touch weight bearing with crutches **Trochlear** - Progress to full weight bearing as able	• Continue ice and elevation • Ensure adequate pain relief • Hourly PROM flexn/extn exs in prone/sitting using unaffected leg for support • Heel props • Extension mobilisations if required • Static Qs/SLRs • Early VMO • Gluteal strengthening	• Minimal pain • Full range extension • SLR with no lag

	Trochlear brace to limit ACTIVE ROM 0-30 degrees. Full passive ROM		• Proprioception exercises	
Weeks 4-6	**Femoral condyle** - No limit to passive ROM. Active movement limited to range that does not engage the lesion **Trochlear** - brace to limit ACTIVE ROM 0-30 degrees. Full passive ROM	**Femoral condyle** - PWB with crutches **Trochlear** – FWB within brace at 0 to 30 degrees	• Continue ice therapy as required • Continue regular PROM exs • SLRs with resistance • Isometric, co-contraction quads/hams in range that does not engage the lesion • VMO/Gluteal strengthening • Hydrotherapy if appropriate • Proprioception exs	• No pain • Minimal/no effusion • SLR x 10 with no lag
Weeks 6-12	No limit to AROM	FWB, no walking aids Discard brace (if applicable)	• Exs bike with increasing resistance • Treadmill walking • Step ups/cross trainer/rower • OKC hams – increase resistance as tolerated • OKC quads – increase resistance as tolerated, avoiding range at which lesion engaged • Squats, lunges	• No pain • No effusion • Normal gait pattern

Weeks 12-16	Full AROM	FWB	• Progress strength training – no limits • Treadmill – commence light jogging and progress as symptoms allow • Progress to early change of direction running • Plyometrics	• No pain • No activity related swelling • Normal running pattern
Weeks 16-20			• Agility/cutting/twisting • Sport specific	• Symptom free sports specific training
From week 20 onwards			• Return to full competitive sport	• Fully fit for demands of specific sport

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