POST-OPERATIVE PROTOCOL FOR: POSTEROLATERAL CORNER RECONSTRUCTION/REPAIR
COMBINED POSTEROLATERAL CORNER PLUS ACL AND/OR PCL
COMBINED POSTEROLATERAL CORNER PLUS MCL PLUS ACL AND/OR PCL

Ensure patient achieves milestones prior to progression
No return to contact sports prior to 9 months post-op
Return to gentle non-contact, non-competitive sports at physiotherapist’s discretion but must be over 8 months post-op
Any problems during rehabilitation please contact Jo Armstrong or Dan Wright at Wrightington Physiotherapy Department 01257 256533

PHASE 1 POST-OP – Post reconstructive surgery (day 1-14)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Treatment</th>
<th>Milestones to Progress</th>
</tr>
</thead>
</table>
| Graft protection                        | • Cricket pad splint to be worn at all times when mobilizing and for sleeping  
• Use of crutches TOUCH WB ONLY         | • Ensure patient has attended first post-operative clinic review (at 2 weeks post-op) |
| Minimise swelling and pain              | • Use of ice or Game Ready if available                                  | • Minimal effusion  
• Elevate leg                              | • Full or nearing full extension                                        
• Ensure adequate pain relief             | • 90° knee flexion  
| Prevent post-operative complications    | • Circulatory exercises  
• Patella mobilizations                  | • SLR with no lag (10 reps)                                               
| Maintain muscle strength                | • Regular static quads  
• SLR if able                             | • Normal, symmetrical gait pattern with crutches                           

PHASE 2  2 weeks to 6 weeks

<table>
<thead>
<tr>
<th>Goal</th>
<th>Treatment</th>
<th>Milestone to Progress</th>
</tr>
</thead>
</table>
| Graft protection                        | • Hinged knee brace (ROM 0°- 90°) to be worn at all times when mobilizing. Cricket pad split to be worn in bed  
• Use of crutches PARTIAL WB ONLY        | • Minimal effusion  
• Full or nearing full extension         | • 90° knee flexion  
• SLR with no lag (10 reps)              | • Ensure patient has attended their 6 week clinic review |
| Minimise swelling and pain              | • Use of ice or Game Ready  
• Ensure adequate pain relief            | • Normal, symmetrical gait pattern with crutches  
• Elevate leg                            | • Ensure patient has attended their 6 week clinic review |
| Regain full range of extension          | • Active extension exercises: static quads  
• Passive stretching  
• Initially avoid hyperextension         | • Normal, symmetrical gait pattern with crutches  
| Increase knee flexion as pain allows    | • Passive flexion exercises in prone (no                                  | • Ensure patient has attended their 6 week clinic review |
### PHASE 3  
6 weeks – 12 weeks

<table>
<thead>
<tr>
<th>Goal</th>
<th>Treatment</th>
<th>Milestone to Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graft protection</strong></td>
<td>- Hinged knee brace (no restriction to ROM) to be worn at all times when mobilizing.</td>
<td>- Minimal/no activity related effusion</td>
</tr>
<tr>
<td><strong>Minimise swelling and pain (ensure no swelling before progression) Prevent anterior knee pain</strong></td>
<td>- Continue as above, as necessary</td>
<td>- Full range of extension</td>
</tr>
</tbody>
</table>
| **Regain/maintain full range of extension/hyperextension (compare to non-operative knee)** | - Extension exercises as above  
- Heel props, prone hangs  
- Passive stretching | - Normal gait pattern without crutches  
- Full range of flexion  
- Single leg stand eyes shut at least 5 seconds  
- Bilateral squat, thighs parallel to floor with even, symmetrical weight bearing  
- **Ensure patient has attended 12 week clinic review** |
| **Restoration of normal gait pattern** | - FWB gait re-education  
- Treadmill walking | |
| **Regain full range of flexion** | - Active flexion exercises with overpressure  
- Progress to quads stretch  
- Passive stretching as required  
- Hydrotherapy as required | |
| **Improve quads, hamstring and general lower limb strength** | - CKC – wall slide squats (start at 60° flexion and progress), squats, leg press (start at 60° flexion and progress), single | |

**Improve quads control and muscle strength**  
- Static quads, SLRs. **Ensure patient can SLR with no lag**  
- Co-contraction quads and hams  
- Active OKC Qs (60° to full extension) **NO OKC QS IF COMBINED WITH ACL**  
- Early gluteal strengthening  
- Early core stability strengthening

**Ensure flexibility**  
- Hamstrings stretch in supine  
- Calf stretches

**Restoration of normal gait pattern**  
- Gait re-education with elbow crutches PWB

**Attention to donor leg if graft harvested from contralateral side**  
- Restore full range of motion ASAP  
- Commence muscle strengthening  
- Commence muscle stretching
<table>
<thead>
<tr>
<th>Phase 4</th>
<th>Upon achievement of phase 3 milestones and no sooner than 12 weeks post-op</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td><strong>Treatment</strong></td>
</tr>
<tr>
<td>Control activity related swelling and pain</td>
<td>Use of cryotherapy post exercise if knee swells with increased activity</td>
</tr>
<tr>
<td>Regain/maintain full range of movement</td>
<td>Continue stretches</td>
</tr>
<tr>
<td>Normalise gait and stair pattern</td>
<td>Discontinue brace on instruction at 12 week clinic review (continue with brace if patient has not attended clinic). Treadmill walking – forward/backward/incline</td>
</tr>
<tr>
<td>Improve quads, hamstring, and general lower limb strength</td>
<td>Continue CKC – double &amp; single leg press, squats, single leg squats, commence lunges, increase weight OKC Qs – increase load Commence OKC Hamstring curls – double</td>
</tr>
</tbody>
</table>
Increase aerobic capacity
- Exs bike
- Treadmill walking
- Step ups
- Cross trainer
- Rower
- Pool walking/running

Improve proprioception
- Single leg stand eyes closed
- Wobble board
- Sitfit
- BOSU
- Trampette

Neuromuscular control
- Core stability work
- Knee alignment/prevent valgus as above – add trunk rotation

Phases and Milestones

**PHASE 5 – Upon achievement of phase 4 milestones**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Treatment</th>
<th>Milestone to progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>No swelling or pain</td>
<td>Continue as above if necessary</td>
<td>Normal straight line running pattern</td>
</tr>
<tr>
<td>Normal straight line running pattern without pain and in full control</td>
<td>Progress from jogging to running, Increase speed/distance, Change surface/incline, Forward running/backward running</td>
<td>Single leg press &gt;75% body weight, Single leg stand eyes shut &gt;80% unaffected leg</td>
</tr>
<tr>
<td>Increase muscle strength and endurance</td>
<td>Increase load on strengthening exs (60-80% 1RM), Single leg press – push for &gt;75% x body weight, Commence open chain quads if not already performing and gradually increase resistance</td>
<td>Hop tests &gt;85% LSI: single hop, triple hop, cross over hop, 6m timed hop, side to side hop</td>
</tr>
<tr>
<td>Improve proprioception</td>
<td>Increase dynamic proprioception</td>
<td></td>
</tr>
<tr>
<td>Progress bilateral load acceptance/commence</td>
<td>Tuck jumps with stable landing</td>
<td></td>
</tr>
</tbody>
</table>
### PHASE 6 SPORTS SPECIFIC – Upon achievement of phase 5 milestones

<table>
<thead>
<tr>
<th>Goal</th>
<th>Treatment</th>
<th>Milestone to progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase muscle strength and endurance</td>
<td>Increase load on resistance work</td>
<td></td>
</tr>
<tr>
<td>Progress unilateral load acceptance and work to fatigue</td>
<td>As above – increase speed/intensity to fatigue</td>
<td></td>
</tr>
<tr>
<td>Commence sports specific running agility drills</td>
<td>Sprinting, Cutting and pivoting, Acceleration/deceleration</td>
<td></td>
</tr>
<tr>
<td>Commence sports specific skills</td>
<td>Ball skills, Dribbling, Boxing, Kicking, Sports specific activity with controlled opposition e.g. one on one practice drills</td>
<td></td>
</tr>
<tr>
<td>Neuromuscular control following fatigue</td>
<td>Ensure ability to control alignment under random practice and after fatigue</td>
<td></td>
</tr>
<tr>
<td>Return to non-contract sports (only when nearing 8 months post-op)</td>
<td>Golf/gentle racquet sports</td>
<td></td>
</tr>
</tbody>
</table>

### PHASE 7 FULL UNRESTRICTED SPORTS TRAINING – Upon achievement of phase 6 milestones: MUST BE AT LEAST 9 MONTHS POST-OP

<table>
<thead>
<tr>
<th>Goal</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptom free training</td>
<td>Full, unrestricted training</td>
</tr>
<tr>
<td>ROM and muscular flexibility equal to other side</td>
<td>Continue stretching</td>
</tr>
<tr>
<td>Good results of all functional testing</td>
<td>Functional tests prior to returning to contact sports</td>
</tr>
<tr>
<td>Return to full unrestricted, confident activity</td>
<td>Progress to uncontrolled practice situations and competition</td>
</tr>
</tbody>
</table>
References


