# Knee Replacement Rehabilitation Protocol

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<th>Stage</th>
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| Pre-operative  | Maximise conditioning for accelerated recovery      | Physiotherapy assessment to optimize joint strength, ROM, flexibility and balance  
Daily use of stationary bike to strengthen quadriceps (thigh) muscle; balance and core exercises (eg Pilates, yoga, Wii-Fit)                                                                                   |
| Weeks 0-2      | Soft Tissues                                        | Swelling reduction critical to reduce pain and improve ROM (aim 0-90°)  
1. Cold therapy 6-8 times per day (for 20 min. periods)  
2. Constant leg elevation (ankle at level of chest whilst reclining or lying down) unless exercising  
3. Short leg TEDS stockings both lower limbs with double layer tubigrip to operated knee  
4. Regular calf and quads co-contractions  
Rehab Exercises | SEE OVER PAGE EXERCISES 6-8 times per day; follow with ice to knee and elevation of leg for 20-30 minutes  
Mobility       | Immediate full weight bearing with crutches          |                                                                                                                                                                                                                  |
| Weeks 2-6      | Soft Tissues                                        | No dressings from day 12 unless during hydrotherapy  
Daily scar and lower limb massage eg Vit E, sorbolene cream, bio-oil  
Continue with swelling reduction techniques as above  
Rehab Exercises | Commence outpatient hydrotherapy program 1-2 times per week  
Continue EXERCISES OVER PAGE; Stationary bike can commence at 3-5 weeks  
Mobility       | Walking 10 to 20 minutes 1-2 times per day  
Slowly wean off ambulatory aids at home; continue use outdoors |                                                                                                                                                                                                                  |
| Weeks 6-12     | Rehab Exercises                                     | Continue home-based exercises including ROM (aim 0-120°) and lower limb stretches  
Increase strengthening exercises eg resistance bike and gym program  
Mobility       | Increase walking distance 20 to 40 minutes per day  |                                                                                                                                                                                                                  |
| Weeks 12+      | Return to functional activities                     | Resumption of normal activities (eg golf, tennis, bike riding and bowls)  
Kneeling on knee can commence on soft cushions for short periods of time if comfortable  
Consider long term exercise program to optimize knee function (eg: bike 3 times per week, swimming, gym exercise, balance)                                                                                     |
| Medications    |                                                      | 1. DVT medications for up to 4 weeks from surgery (eg aspirin, clexane)  
2. Continue regular Panadol Osteo for up to 4-6 months  
3. Celebrex 200mg daily for between 6-12 weeks (improves ROM and reduces needs for stronger medications)  
4. Strong slow release pain killers eg Targin or Tramadol SR may be needed to assist in sleeping for 6-8 weeks  
5. As needed medications such as Endone and Tramadol can be used when required, and often help prior to rehab. |                                                                                                                                                                                                                  |