

REHABILITATION FOLLOWING KNEE RESURFACING ARTHROPLASTY

Medial and Lateral Inlay and Onlay

Post-Operative Physical Therapy Protocol

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0 - 2 Weeks Rehabilitation:

- Full weight bearing immediately
- Use 2 crutches and brace locked at 0
- Range of motion – free flexion as tolerated
- Patellofemoral mobilizations
- Static bike after 1-2 weeks when comfortable flexion achieved.
 - 500 revolutions 3 x/day.
- Cold therapy may be used as required
- Limited strength training is initiated immediately:
 - SLR no lag, IRQs, static quads, hams & glutei, open chain quads no resistance

Initial post-operative goals - Week 2

- Full passive knee extension
- Minimal pain & swelling

2 - 6 Weeks Rehabilitation:

- Rapid progression from 2 to one crutch as tolerated
 - Anticipate no crutches by 4 - 6 weeks. D/C crutches when no quad lag
- Heel slides
- Knee Flex/ Ext (Gym ball – heel on ball)
- Knee flex/ Ext/ Abd/ Add with knee Ext
- Hamstring/calf Stretch in standing

- Core stability exs (Gym ball)
- Knee Flex/Ext in standing with theraband to resist (0-30°)
- Proprioception work
- Rowing machine
- Leg press – no resistance (10° - 70°)

Week 6 Goals:

- FWB
- FROM
- Normal gait
- Good knee control

7 - 12 Weeks Rehabilitation:

- Should have FROM
- Gait re-education
- Step ups on 10cm step (40°)
- Mini stepper
- Gym ball:
 - Bridging
 - Knee Flex/Ext sitting on ball, double/ single
 - Sit to Stand
- Rowing machine increasing loading
- Static bike with resistance/ outdoor cycling on level ground
- Treadmill slow walking fwds/bwds
- Increase proprioception
 - Trampoline single leg stands
 - Single leg mini squat
 - Wobble board
- Lateral step downs on 10cm (40°) step, forward step downs on 10cm step
- Hip Abd/Add/Flex/Ext in standing theraband to resist with knee Ext
- Single leg mini squats on trampoline
- Step on/off trampoline with operated leg
- Full stepper/cross trainer
- If adequate extension control – can begin fast walk on treadmill, gradually progress to slow jog under supervision.

3 Month Goals:

- Pain free FROM
- Satisfactory eccentric control to perform 10cm step down with neutral pelvis
- Able to complete 1 hour of light exercise

3 - 4 Months Rehabilitation:

- Circuit training
- Gentle jog/shuttle runs
- Gentle change of direction
- Single leg hurdle/step over
- Accelerate/decelerate up to 50% speed
- Plyometrics: skipping, hopping, star jumps

4 - 6 Months onwards: Return to full sport phase

- Should have confidence in knee
- Can now run unsupervised if adequate control
- Accelerate/decelerate $\frac{3}{4}$ speed
- Figure of 8 runs fwds/bwds
- Slalom fwds/bwds
- Gradually introduce cutting/sudden stop
- Run – sit – run
- ↑ distance
- Progress to sprints 10m – 20m – 50m
- Can begin sports specific training when agreed with consultant/physiotherapist
- Quads strength should be equal to other leg
- Hamstrings 75% of quads