

## 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