



Dr Abay Sundaram - Orthopaedic Surgeon

P 08 6332 6335

E admin@drsundaram.com.au

W drsundaram.com.au



Murdoch

Murdoch Orthopaedic Clinic

Suite 10, 100 Murdoch Drive

Murdoch, WA 6150

Total Hip Replacement & Revision THR Rehabilitation

Goals

- Ambulation with mobility support within 24 hours
- Full extension through pelvis when standing: 72 hours
- Walking: symmetric gait by 4 weeks (with single crutch if needed)
- Driving: recovery of reflexes by 4 weeks
- Wean off opiate analgesia by 2 to 4 weeks
- Aim for quiet hip by 3 months: continue RE3 cryotherapy as needed

Hip precautions

- No formal “hip precautions” but for both anterior and posterior approach, avoid:
 - Bending forward to reach blanket
 - Bending down to pick up objects
 - Torsional movements: Standing and pivoting or turning with foot planted
- Anterior approach:
 - Avoid external rotation with hip extension
 - Avoid full extension of glute bridge until week 6
 - Avoid straight leg raise while supine or heel slides until week 2: encourage patient to flex hip before initiating any movements when starting supine.
- Posterior approach:
 - Avoid internal rotation with hip flexion

Pre-op Phase:

- Core & pelvic strength: transverse abdominis, gluteus maximus, gluteus medius & minimus, hip flexors (psoas, rectus femoris)
- Improve aerobic exercise tolerance: swimming or hydrotherapy
- Manage pain and swelling: RE3 cryotherapy pre-operatively
- Nutrition & gut health: Mend nutrition or balanced diet at home: high in fibre and protein.



Dr Abay Sundaram - Orthopaedic Surgeon

P 08 6332 6335

E admin@drsundaram.com.au

W drsundaram.com.au



Murdoch

Murdoch Orthopaedic Clinic

Suite 10, 100 Murdoch Drive

Murdoch, WA 6150

Phase 1: In hospital

- Eliminate swelling: RE3 cryotherapy daily
- Ambulation: mobilise on day of surgery with physiotherapy if blood pressure allows
- Range of motion:
 - Standing hip abduction and adduction
 - Seated heel slides and knee extensions
 - Sit to stand: do not seat deeper than 90 degrees of hip and knee flexion. Stand and encourage full extension through pelvis
 - Calf pumps
- Isometric:
 - Supine glutes “butt clencher”
 - Supine hamstrings: heel into bed
 - Supine quadriceps: knee into bed
- Immediate weight bearing
- Education: getting in and out of bed (non-operated side leads)
- Checkpoints for discharge:
 - Safe independent mobility in and out of bed, up and down stairs if required, and ambulation with assistive device
 - Gut function: must tolerate regular diet and open bowels
 - Support for ADL available at discharge destination

Phase 2 (0 to 6 weeks): Rest & Recovery

- Manage pain and swelling with RE3 cryocompression
- Restrict step count to avoid overuse and instigating inflammatory cascade:
 - Week 1: 1000 steps per day maximum
 - Week 2: 2000 steps per day maximum
 - Week 3: 3000 steps per day maximum
 - Week 4: 4000 steps per day maximum
 - Week 5: 5000 steps per day maximum
 - Week 6: 6000 steps per day maximum
- Proprioceptive work from day 1: falls prevention + functional recovery
 - Single leg stance: bar or chair in front for support
 - Step up to single step, pause, step down: must achieve full extension at top and bottom of step
- Strengthening:
 - Standing hamstring curls
 - Barre-type exercises: short range of motion, static holds, pulses
 - Glute bridge



Dr Abay Sundaram - Orthopaedic Surgeon

P 08 6332 6335

E admin@drsundaram.com.au

W drsundaram.com.au



Murdoch

Murdoch Orthopaedic Clinic

Suite 10, 100 Murdoch Drive

Murdoch, WA 6150

Phase 3 (6 – 12 weeks): Strength and function

- Manage swelling and pain following work outs with RE3 cryocompression
- Barre-type exercises
- Standing lateral band walk/crab walk with resistance band if progressing well
- Single leg glute bridge
- Squats:
 - No further than 45 degree against wall
 - 90 degree seated to stand with chair in front to support
- Begin deadlift: aim for maximal range, higher reps, lower resistance
- Side planks
- Avoid lunges for 3 months
- Avoid torsional activity for 3 months: e.g. golf
- Aerobic recovery:
 - Stationary bike: range should have recovered to facilitate
 - Swimming: no risk of wound permeability
- Proprioceptive work – advanced if core and pelvic stabilizer strength have recovered to symmetrical (balance board – dual leg or single leg if advanced)

Seek advice if:

- Erythema around wound or discharge: do not start antibiotics, call Dr Sundaram immediately
- Sudden increase in pain and swelling in phase 2: xray, review with Dr Sundaram: RE3 cryotherapy, review step count, rest and recover range.
- Persistent swelling beyond 3 months: call Dr Sundaram for review
- Joint replacement can take up to 12 months to become “forgotten” but most unhappy patients at that 12 month mark will have had an issue with phase 1 range of motion, phase 2 swelling, or a wound concern at any time point.
- Any sudden pain and inability to weight bear needs Emergent review with xray and call to Dr Sundaram.