

Physiotherapy Rehabilitation Post Surgery

Claire Fitzpatrick and Kate Pascoe

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Aims Of Session:

- What is rehabilitation
- Why do we need to rehabilitate a patient?
- The role of the Physiotherapist
- Physiotherapy following anaesthetic
- Post operative assessment
- THR and TKR precautions
- Bed exercises
- Mobility
- Standing exercises
- Manual handling advise
- Advise after discharge from hospital

What is Rehabilitation?

‘Return to normality’

- Aim to regain previous ability to perform activities of daily living
- Maximising potential of movement to achieve the best possible outcome regaining functional use of the affected body parts
- Achieve patient goals

Physiotherapy

- Physiotherapy: science-based healthcare profession
- Movement as central to health and well being.
- Physiotherapy believes that movement and exercise promotes healing
- Make the most of movement ability by health promotion, preventive advice, treatment and rehabilitation.

Rehabilitation in practice



Principles of Post Op Rehab

- Aim to reduce pain
- Reduce swelling
- Increase ROM
- Improve muscle strength
- Aid proprioception
- Mobilise patient
- Educate patient and family members
- Facilitate normal recovery processes
- Consider the patient's chest

Goal Setting:

- SMART goals
- Specific
- Measurable
- Achievable
- Realistic
- Timely
- Long and short term
- Patient Centred
- Agreed with patient and physiotherapist

Effects of anaesthetic

- Can slow breathing rate
- Decreased basal expansion of lungs
- Sputem retention
- Lowers blood pressure
- Drowsiness

Chest Physiotherapy

- Encourage deep breaths (at least 5x hourly)
- Breathing exercises
- Cough
- Huff
- Sitting upright to increase basal expansion
- Mobilise

Post Operative Assessment

- Operation
- Any blood loss? HB? Transfusion?
- Post operative instructions from surgeon
- Weight Bearing status
- Dressing?, polysling?, plastering?, backslab?
- Lines/drips/drains/epidural
- Analgesia
- Observations, HR, BP, RR, Spo2, temp, infective markers ie WBC

Precautions following THR/ TKRs

THR :-

In order to help prevent dislocation the patient should avoid the following:

- Bending at the hip more than a right angle
- Crossing your legs
- Twisting

TKR:-

- Avoid kneeling

The patient may need to continue to adhere to these 3 months



Post Surgery

- Maintain circulation by encouraging ankle ROM.
- Limits risk of DVT
- Begins process of regaining movement
- Check medication – useful to time physio with analgesia.



Bed exercise- Gluteals

- 1. Buttock Contractions.



- Tighten your buttock muscles, hold for 5 seconds, release.
- Repeat 10 times.

Bed exercise : Quads

1. Lying on the bed. Push your knee into the bed for 5 seconds.



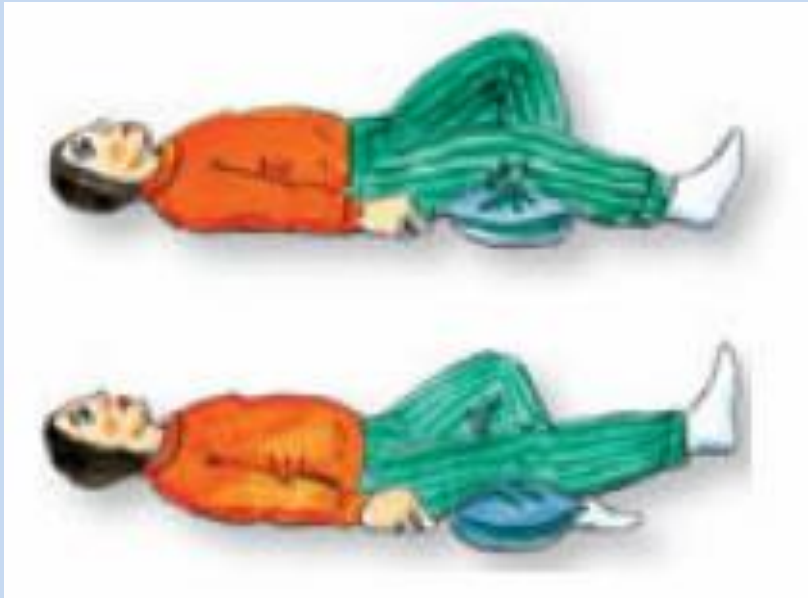
- Repeat 10 times.

Bed exercise : Knee Flexion



3. Slide your heel along the bed as you start to bend the knee.

Bed exercise: Inner range Quads



- *Place* a rolled up pillow under your knee- push your knee into the pillow and lift the leg.

Bed exercise: Straight leg raise



- Tighten your thigh muscle with your knee fully straightened on the bed. Lift your leg, several inches off the bed. Hold for 10 seconds. Slowly lower.
- Repeat X 10 times.

Mobility: Day One

- It is safe to get out of bed on day one unless there is a medical reason not to
- Nursing staff or physio can take all the lines and drains
- May need help patients to mobilise due to pain, anxiety, BP drop, fatigue
- Initially will use a zimmer frame to aid balance and weight bearing
- Generally aim to sit in chair for one hour

Days 2-3

- Dressings and drains have been removed mobilise with support from a zimmer frame and nursing staff. Aim to/from toilet
- As the operated limb gets stronger, progression from zimmer frame, Elbow Crutches, stick, eventually aim=independent.
- Consider prior baseline mobility aid

Exercises 2-3 x daily. Emphasis is on patient doing exercises independently.



Additional Exercise's - Standing

Hip abduction /
flexion/extension

Marching on the spot

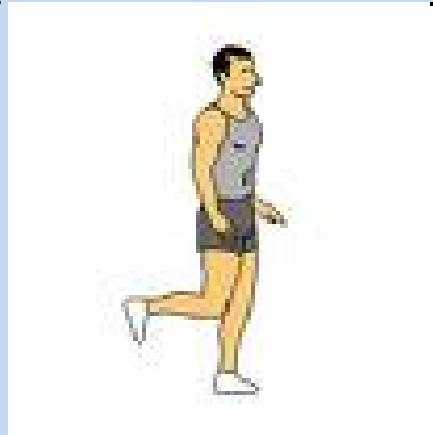
Squats

Heel raises

Toes Raises

Side stepping

Weight transference



Stair Climbing and Descending



- Always lead up the stairs with your good leg and down the stairs with your operated leg.
- Ascending- crutches stay down
- Descending – crutches down 1st

Mobility Progression:

- Take an aid with you until you have regained your balance skills.
- In the beginning, walk 10 minutes 3 times a day. As strength improves, walk for 20, 3 times a day.
- Once you have fully recovered, regular walks, 20 or 30 minutes 3 or 4 times a week, will help maintain your strength.

Advice to Patients...

- Continue with normal activities as much as possible within limits of pain
- As a rule, don't do anything that causes a lot of pain
- Set a new goal each day.
- For example, walking around the house on one day, a walk to the shops the next, etc.

- In the past, advice had been to rest until the pain eases. **Wrong!**

The patient is likely to recover more quickly, if they keep active, rather than resting.

- Sleep in the most naturally comfortable position on whatever is the most comfortable surface.

Full Recovery:

- *A full recovery may take many months.*
- *The pain prior to the operation may have caused long term weakness*

It's very important to continue with the exercises for 3 months after surgery.



Manual Handling

- Essential that staff look after their backs.
- Bend your knees NOT your back
- Pull in your tummy muscles
- Use Equipment where possible
- Raise the bed height
- Double up



Complications of Surgery

- Poor wound healing
- Dvt
- Delayed healing of soft tissue or bone
- Adhesions or contractures
- Loosening of the implant = instability and pain
- Immobility can lead to chest complications inc pneumonia.

Remember...

- **No injury can be made to heal faster than its natural speed, The tools – thousands of cells getting on with their jobs – cannot be improved. All that can be done is ensure no contrary influences are allowed, and that all possible favourable conditions are encouraged**

– Evans 1980

Summary

- Physiotherapy - aims to improve muscle function and range of movement, thus enhancing function
- Teach ankle circulation exercises, deep breathing exercises and bed exercises, ASAP
- Help patients to get out of bed on 1st day post operation
- Empower the patient to take responsibility for their rehabilitation- remind them to complete their exercises at least three times a day!
- Patients can only go home when they have safe mobility and sufficient movement and strength.
- **Any questions?**