Physiotherapy Rehabilitation
Post Surgery

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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
- Sputum 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/TKR

**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?