

Department of PHYSIOTHERAPY

Physiotherapy After Surgery: A Patient Information Booklet



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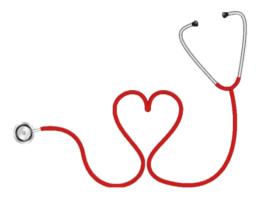
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1. Effects of Surgery

You have been advised by your doctors to undergo surgery. This booklet has been prepared to allow you to understand what can happen after surgery so that you will be able to understand the role of Physiotherapy in helping you through your recovery.

After surgery, it is common for lung complications to occur due to:

- 1) The effect of anaesthesia which relaxes your breathing muscles and causes shallow breathing
- 2) The pain experienced from the wound site which may prevent you from taking deep breaths and limit your ability to cough to clear phlegm (if any)
- 3) Spending more time in bed which does not allow your breathing muscles to work well to help you take deeper breaths.

After the anaesthesia wears off, it is important for you to start performing breathing exercises, coughing to clear phlegm (if any) and moving your limbs. These work together to prevent lung complications as well as maintain muscle strength to prevent a decline in your physical function.

The role of Physiotherapy is to keep you free from lung complications and prevent a decline in your physical function by maximizing your fitness before and after surgery to enhance recovery.

A. Breathing Exercises

After your surgery, you will be encouraged to perform deep breathing exercises and use your Incentive Spirometer for at least 10 times every waking hour.

(Refer to Page 3 and 4 of the Physiotherapy Before Surgery booklet).

B. Supported Cough

Coughing will help to remove the phlegm in your lungs.

- To help you cough with less pain:
 - 1. Place a pillow/towel over the wound site.
 - 2. Place your hands over it.
 - 3. Apply some pressure to support the wound.
 - 4. Take a deep breath to fill your lungs and try to cough until phlegm has been expelled.



Abdominal Surgery



Thoracic Surgery



C. Getting Up From the Bed

Getting up from lying down in bed may be difficult during the first few days after surgery. This is due to the pain felt from the wound while trying to sit up.

An easier way to get up from the bed is to:

- 1. Place your hands on a towel over your abdomen to support your wound.
- 2. Bend both your knees slowly and roll to your side.
- 3. Bring both legs over the edge of the bed.
- 4. Push on the bed using your hands to sit up.









D. Exercises To Perform After Surgery

These exercises help to maintain joint movement and promote blood circulation to prevent clots from forming in your legs. You can perform the following exercises at least 10 times/day.

1. Ankle Pumps

Lie flat, keeping both legs straight. Bend your ankle towards you, then point it down towards the bed.





3. Seated Heel Raises

Place both feet shoulder-width apart. Lift your heels, keeping your toes in contact with the ground. Hold for 5 seconds before lowering your heels back to the ground.



2. Heel Slides

Bend your knee as much as you can by sliding your heel towards you along the bed. Slowly straighten your leg fully.



4. Knee Extension

Straighten your knee while tightening your thigh muscles as much as you can. Hold for 5 seconds before lowering your leg down to the floor.



E. Activity Milestones

After surgery, you will experience pain and tiredness. Nevertheless, you are encouraged to start moving out of bed as soon as possible to enhance your recovery. To facilitate this, therapy sessions will be scheduled together with your pain medications.

Below is an example of a timeline for functional recovery after surgery.



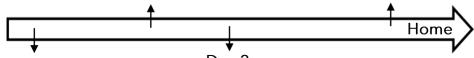
Day 1:

- Perform breathing exercises.
- Sit on a chair (more than 1 hour)
- Start walking if possible.



Day 3 Onwards:

 Increase walking distance as tolerated.



Day of Surgery:

Perform breathing exercises.

Day 2:

- Breathing exercises.
- Sit on a chair.
- Walk as tolerated.



Aim to regain normal body functions as soon as possible.



3. Post Discharge Advice

You should continue with the exercises prescribed by your physiotherapist after discharge. You are encouraged to be as active as possible. Upon discharge, continue walking at a comfortable pace within your house or along the corridor. You should be able to talk without getting breathless while walking on flat ground.

Tips when exercising at home:

- > Avoid heavy lifting (over 5kg) for the first 4 to 6 weeks
- > Dress lightly and wear proper footwear (e.g. running shoes)
- Drink water adequately

When you are able to walk confidently, you may consider:

- 1. Slowly increasing the distance of your walk.
- 2. Increase the frequency of walking (e.g. once per day to 2-3 times/day).
- 3. Increase the speed of walking to a pace that is slightly challenging.
- 4. Try climbing stairs/ slopes.

Stop exercise if you experience the following:

- Chest pain/ chest tightness
- Breathlessness (unable to speak in sentences)
- Dizziness
- Cold sweat
- Nausea and vomiting

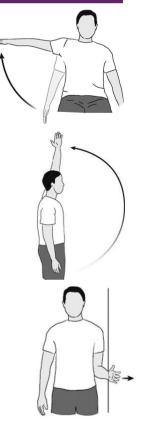


Annex 1 – For Thoracic Surgeries Only

To avoid stiffness in the shoulder, here are some exercises to perform after surgery:

- 1. In sitting or standing, raise your arm up towards the <u>side</u> as high as you can in a comfortable and pain-free range.
- 2. In sitting or standing, raise your arm up towards the <u>front</u> as high as you can in a comfortable and pain-free range.
- 3. In sitting or standing, keeping your elbows bent and close to the side of your body, bring your hand <u>outwards</u> in a comfortable and pain-free range.

Perform 3 sets of 10 repetitions, 3 times a day. Perform the exercises within your level of comfort. The exercises **should not** be painful to do.



Note:

- Avoid heavy lifting (over 5kg) with the arm on the side of your wound for approximately 6 weeks after the surgery.
- Try to use your shoulder and arm as normally as possible.
- Keep moving your shoulder and arm until movement is pain-free and back to normal.

Notes

Notes

Clinics B1C (Physiotherapy)

TTSH Medical Centre, Level B1

Contact:

6357 7000 (Central Hotline)



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