

Physiotherapy after Surgery



INTRODUCTION

This booklet provides information on some potential problems such as chest infections or deep vein thrombosis, which may happen after your operation and what **you** must do to help in preventing these. We encourage you to share this information with your family and friends to help them to also understand the importance of doing the recommended exercises.

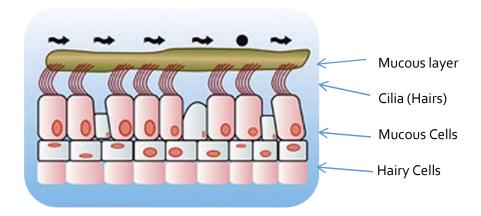
PAIN RELIEF

The staff at the hospital will work hard to keep any pain felt after this operation to a minimum. The pain team will visit daily to discuss which sort of pain relief is right for you.

It is very important that **pain doesn't limit your ability** to do your exercises after the operation. Please don't hesitate to talk to a nurse or doctor if your pain levels are stopping you from walking and doing your breathing or coughing exercises after the operation

CHEST INFECTIONS – WHY YOU ARE AT RISK

Your lungs are normally kept clean by a thin layer of mucous that lines your airways. Dust particles and germs that you inhale with each breath stick to this layer of mucous. Tiny hairs (cilia) sit underneath this dirty mucous (phlegm) and sweep it out of your lungs and to the back of your throat where it is then swallowed and disposed of. This process happens every day of your life without you even knowing about it! It is normal to produce about 120mls (1/4 of a cup) of phlegm a day.



After surgery, however, a more than the normal amount of mucous is produced - too much for your normal cleaning mechanisms to deal with. Extra help is now required to clear the phlegm. This is when you need to **cough or huff** to get rid of it all. If the phlegm remains in your lungs too long, it can become a growth site for bacteria and this can lead to a chest infection.

WHAT INCREASES MY CHANCES OF GETTING A CHEST INFECTION?

- Being a smoker
- Having a lung condition
- Being unfit
- A long operation (> 3 hours)
- Slow to start walking after operation
- Being older
- Uncontrolled pain

WHAT HAPPENS IF I GET A CHEST INFECTION?

If you get a chest infection after your operation you will become quite sick. You will get a fever and a bad cough, have difficulty breathing and may need go back to the ICU to be looked after.

At worst, you could die. You will spend a lot longer in hospital and your recovery from your operation will be slower.

EXERCISES TO DO AFTER YOUR OPERATION TO PREVENT A CHEST INFECTION Deep Breathing

After your operation your lungs will be a little deflated and your breathing will be shallower than usual. This is due to a combination of reasons:

- Use of a breathing machine called a ventilator during the operation
- Use of pain relief medications
- Lying in bed more than usual and not being active

It is important you do your best to re-inflate and exercise your lungs as soon as possible after the operation to reverse these changes.

Coughing

It is very important that you clear your lungs of any phlegm. A build-up of phlegm can harbor infections and cause breathing difficulties. If your surgical cut (incision) is on your chest or belly it can be painful to perform a good cough. Hold a pillow tightly over your incision to support the area to help reduce the discomfort. Your physiotherapist may also teach you how to "huff" which is an alternative to a cough that tends to hurt less. Alert your nurse if your pain levels are preventing you from coughing.

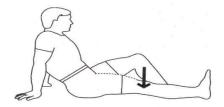
BREATHING AND COUGHING EXERCISES

- Take 5 slow deep breaths
- Hold each breath for 3 seconds
- Gently press your "cough pillow" to your wound
- Cough or Huff twice
- Repeat all this again

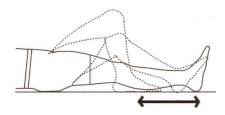
Do this every hour during the day

CIRCULATION EXERCISES

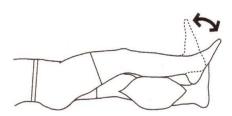
Another exercise that is important while you are lying in bed are ankle and leg exercises to keep the blood flowing through your body. This helps to maintain good circulation and prevents clots forming in your legs.



A. Moving foot up and down. Free the calf muscle working.



B. Slide leg up and down the bed. Keep heel on the bed.



C. Tighten and relax front of thigh muscles

GET WALKING

Walking after your operation is one of the most important things you can do to prevent complications.

- Walking helps the flow of blood around your body which is important for wound healing.
- Walking helps expand your lungs & helps prevent chest infections.
- Walking strengthens your muscles.
- Walking helps your digestion and urinary tract function.

The plan for walking after most operations:

4 hours after your operation the nursing staff will help you:

- Hang your legs over the edge of the bed
- Sit out of bed for 10-20 minutes.

1 day after your operation the nursing staff will help you:

- Walk to the shower Sit out of bed for 2 hours in the morning and 2 hours in the afternoon
- Walk 50m in the morning and 50m in the afternoon.

2 days after your operation the nursing staff will help you:

- Sit out of bed for 3 hours in the morning and 3 hours in the afternoon
- Walk 100m the morning, afternoon and evening.

3 days after your operation the nursing staff will help you:

- Sit out of bed for 4 hours in the morning and 4 hours in the afternoon
- Walk 100m four times.

From day 4 onwards we strive to have you out of bed for the whole day and have you walking at least 100 m four times throughout the day

A Physiotherapist may visit you while you are in hospital to help you to get walking safely.

KEY MESSAGES

YOU are AT RISK of complications such as chest infections

- Complications may prolong your hospital stay, cause serious illness and potentially be fatal
- t is your responsibility to do your breathing exercises IMMEDIATELY after your operation
- ❖ Walking is an important way to move <u>MORE AIR</u> into your lungs and prevent blood clots after surgery
- ti is shown that the risk of post-operative complications such as chest infections is HALVED if you understand the information in this booklet and complete the recommended exercises. *



^{*} Boden et al. (2017): Preoperative physiotherapy for the prevention of respiratory complications after upper abdominal surgery: pragmatic, double blinded, multicentre randomised controlled trial