

Exercises to help you before and after your abdominal surgery



**Physiotherapy Department
Prince of Wales Hospital**

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About this booklet

This booklet shows you how to do important exercises that will help recover after your abdominal surgery. By doing these exercises you lower your risk of problems after your surgery such as chest infections, pneumonia, breathing difficulty, pain or difficulty walking. This helps you to recover more quickly.

We provide you this information before surgery so you can practice the exercises. You should share this information with your family or carers so they can encourage and support you to practice before and after your surgery.

What is physiotherapy?

Physiotherapy helps to restore your movement and function after injury, illness or disability. It also can help reduce your risk of injury or illness in the future.

Our Physiotherapist will meet with you or talk to you on the phone before your surgery to assess your movement and function. They will show you exercises that will help:

- Deep breathing and to prevent chest infections and pneumonia.
- Get your body moving and functioning again after surgery.
- Support your wound when you need to cough or move.
- Early movement to prevent blood clots.

What problems can occur after my surgery?

You are having abdominal surgery. The surgery may last up to 5 hours and afterwards you will have a wound in your abdomen. You will stay in hospital for an extended period of time. Your length of stay can vary depending on your progress after your surgery.

Your body will create more mucous in your airways after your surgery. Lung problems can occur in about 10 – 50% of people who have major surgery. These include: chest infections, pneumonia, collapsed lung, blood clots in the lung, or difficulty with breathing. These complications can happen if you avoid taking deep breathes, not getting out of bed the day after surgery and if you have difficulty coughing up phlegm or mucous after surgery due to pain.

Other complications include pain, drowsiness, nausea or vomiting, wound infection, blood loss, urinary tract infection, clots blocking blood movement in your legs or a slow movement in your intestines.

You will be at higher risk of these problems happening if you:

- Are older in age
- Have poor fitness levels
- Have poor nutrition
- Smoke or drink alcohol
- Have other medical conditions.

Why should I do these exercises?

Our Physiotherapists will show you exercises which will help reduce the risks of these problems happening to you after surgery. By practicing these exercises before surgery you will also prepare your body to deal with the stress of surgery.

Several research studies show that people who do these exercises before their surgery have:

- Increased strength and endurance
- Fewer lung problems
- Faster recovery – returning home from hospital 2 – 4 days earlier than expected
- Lower risks of coming back to hospital because of complications
- Better quality of life.

What exercises should I do to prepare my body for surgery?

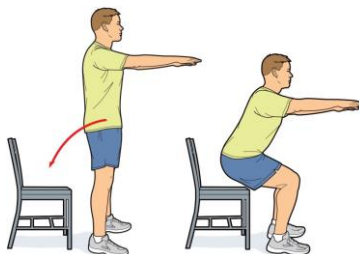
If you currently have a low level of fitness, start slowly with shorter periods of exercise and build up to the recommended amount. These exercises should not cause pain or discomfort.

Walking

Aim to walk 30 minutes five days of the week. It should be at a moderate-intensity. You can separate the 30 minutes into shorter sessions throughout the day. For example three 10 minute walks a day.

Sit to stand exercise

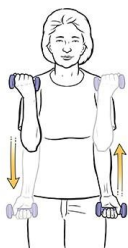
Sit in a chair then stand then return to sitting. Try to not use your arms to stand by keeping them crossed or out in front. Complete this once a day, 10 times and repeat 3 times.



<https://scoutingmagazine.org/2019/02/exercises-you-should-do-every-day/>

Arm exercises

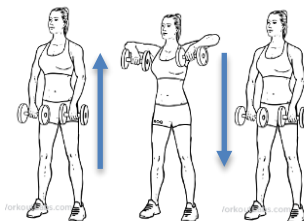
Hold a dumbbell or a bottle of water or tin of food. Do the following exercises once a day, 10 times and repeat 3 times.



<https://fairviewmnhhs.org/patient-education/89961>

Bicep curl:

In standing, bend your elbow and then straighten it.



<https://workoutlabs.com/exercise-guide/dumbbell-upright-row/>

Row:

In standing, lift up weight to chest/shoulder height then slowly move weight down.

What else should I do to prepare for surgery?

Quit smoking

You should try to stop smoking before your surgery. Even for a short period (but the longer before the better) - at least 2 weeks before your surgery and 6 weeks after surgery.

If you continue to smoke it can affect your body in these ways:

- Reduces your oxygen supply to your heart and body
- Increases your risks of lung and wound problems after surgery
- Increases your risks of problems occurring during your anaesthesia
- Increases your risks of blood clots
- Reduces effectiveness of some pain medicines.
- Increases your risk of death after surgery.

How do I Quit Smoking?

Contact 'NSW Quitline'. Phone 13 78 48 or visit www.iCanQuit.com.au.
Your local Doctor (GP) can also help you.

Improve your diet and nutrition

It is important to improve your diet and nutrition before surgery. Also reduce your use of alcohol.

If you need help to improve your health, phone the Get Healthy Service on 1300 806 258 for free, tailored support from a health coach over the phone.

You will need to stop eating (fast) for a short period before your surgery. A nurse will call you to confirm when to start.

What will happen after my surgery?

A Physiotherapist will see you the day after your surgery. They will check your strength and your chest and help you sit out of bed and with exercises for your recovery.

It is important to take your pain medicines regularly so you can do your exercises with reduced pain.

Video links will be provided to demonstrate the following exercises.

Getting out of bed

1. Roll onto your side



2. Drop your legs over the side of the bed and push up to a sitting position with your arms.



3. Keep your hand on the bed, lean forward and push up into a standing position.



Walking

A Physiotherapist will let you know when you need to start walking. They might provide you a walking frame to help support you. You will need help the first day due to lines, oxygen and attachments. You can walk with a physiotherapist, nurse, family member or even on your own. The more walks you can do the better. Walking helps to re-inflate your lungs after surgery.

Deep breathing exercises

Deep breathing also helps to re-inflate your lungs after surgery.

1. Take a deep breath, hold for 3 seconds and slowly exhale.
2. Repeat 5 times.
3. Brace your wound area with a towel and attempt to cough 3 times.
4. Repeat this process – 5 deep breathes followed by 3 coughs.
5. Complete this every one to two hours.

Coughing or sneezing

After your surgery you will have more mucous in your airways. It is very important to clear your lungs of this mucous by coughing to prevent chest infections. It may be painful to cough due to your wound. We will give you a support for your abdomen (cough pillow) to reduce the pain.

When you feel the urge to cough or sneeze, take your pillow and hug it to the wound area on your abdomen by applying gentle but firm pressure.

Let your nurse know if your pain is preventing you from coughing.

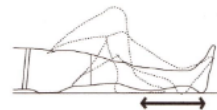
Circulation exercises

When you are in bed it is important to move your ankles and legs to keep blood flowing well in your body. It helps prevent blood clots forming.

1. Moving your foot up and down.
Feel your calf muscle working.



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



3. Tighten and relax front of thigh



Leaving Hospital after your surgery

When you are ready to leave Hospital, different members of your health care team will visit you to provide you information and answer questions. This may include the Doctors, Physiotherapist, Occupational Therapist, Pharmacist and Social Worker.

You will be given your belongings and any equipment, walking aids, follow up appointments or medicines you need. The goal is to be discharged home but you may go to another health facility for a short period of rehabilitation before going home if required.

Please arrange a family member, friend or carer to take you home.

Contacts

Peri-operative clinic:

Location: Level 1, Dickinson Building, Prince of Wales Hospital
Phone: 02 9382 3847

Pre-admissions clinic:

Location: Level 1, Dickinson Building, Prince of Wales Hospital
Phone: 02 9382 3947 or 02 9382 3949


For more information on your exercises contact the Physiotherapy department:

Location: Level 1, High St Building, Prince of Wales Hospital
Phone: 02 9382 2850

Key Points:

- After surgery, you are at risk of problems such as chest infections.
- Such problems can have serious consequences including: a longer stay in hospital, slower recovery, serious illness that can be life-threatening.
- After surgery, you need to focus on:
 - Deep breathing exercises immediately after your operation.
 - Walking when instructed by your physiotherapist to re-inflate lungs and prevent chest infections.
 - Coughing to clear phlegm or mucous from your lungs.
 - Supporting your wound, using a 'cough pillow,' when coughing, sneezing & moving.
 - Circulation exercises to prevent blood clots.
- Practicing these exercises before surgery will improve your recovery after surgery.
- The risk of complications after surgery, 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*



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Barker St., Randwick, NSW
May 2022