

Post General Surgery Physiotherapy Exercises

Major abdominal surgery combine with a general anaesthetic can lead to problems with clearing secretions from the lungs and reduced mobility. There are many ways you can help aid your recovery.

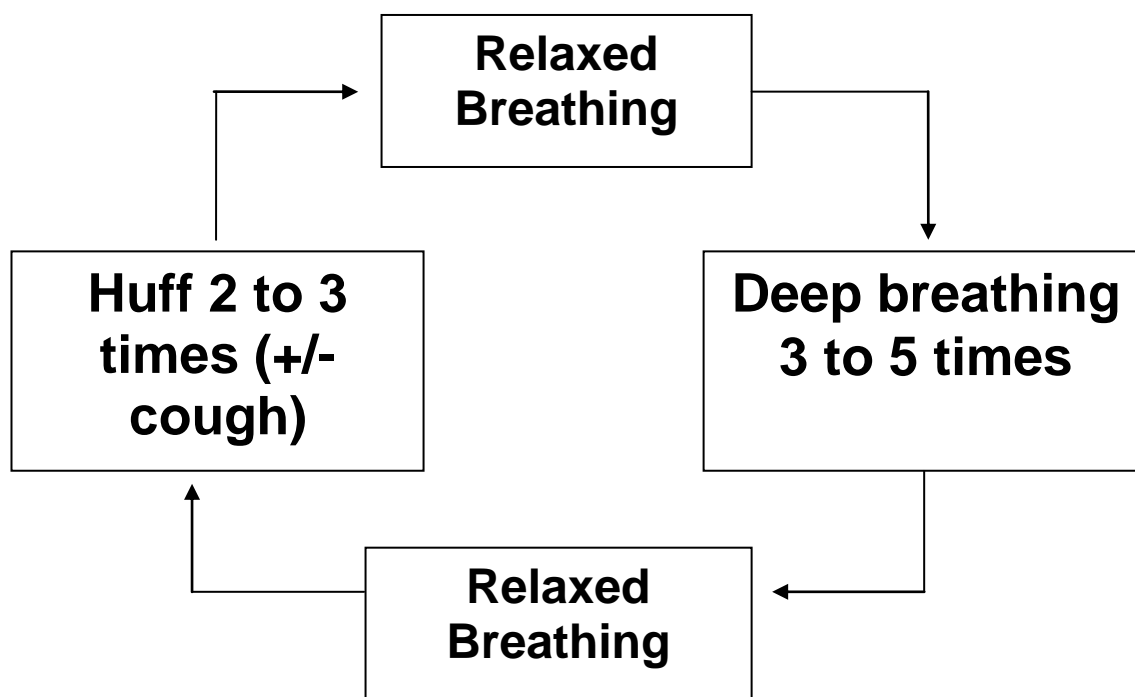
This information leaflet has been put together to help you with some gentle physical and breathing exercises that you can do yourself which will help with your recovery. Gentle physical exercise can help to prevent chest infections and blood clots and can restore muscle strength, motion and flexibility. Breathing exercises can help with moving secretions and prevent a chest infection.

Active Breathing Cycle Technique (ACBT)

The ACBT is a technique to help clear secretions from your chest.

Coughing alone can be tiring and ineffective. The ACBT uses different types of breaths to make it easier to clear secretions by shifting them from the outer part of your lungs towards the main airways.

A typical cycle:



The ACBT can be used in any position that you are comfortable in. Many people find upright sitting the best, but side lying positions can help with clearing secretions.

Relaxed Breathing / Breathing Control

This is normal, gentle breathing using the lower chest. Rest one hand on your abdomen so that you can feel it rise and fall with your breathing.

Breathe in gently feeling your hand rise and your lower chest expand. Breathe out gently allowing your shoulders to relax down. The breath out should be slow, like a “sigh”.

Deep Breathing

Breathe in deeply feeling your lower chest expand as far as possible. Try to keep your neck and shoulders relaxed. Hold the breath for up to 3 seconds. Let the air out gently.

Huff

This is a short sharp breath out through an open mouth that helps force secretions out. There are two types of huff:

From a medium sized breath in, with a long “squeezey” breath out.

From a big breath in, with a shorter sharper breath out.

Start with the first type and progress to the second, using breathing control to recover in between huffs.

Remember the huff needs to be through an open mouth using your abdominal muscles.

Cough

Only cough if you feel the secretions are ready to be cleared. If you have had abdominal surgery use a rolled up towel or pillow and gently hold on your abdomen before coughing.

Stop after two cycles without clearing secretions **OR** until you are tired.

Three deep breathes every half an hour is a good way to check for secretions and improve ventilation especially during an infection.

If you have an infection you will need to do the cycle several times a day to clear the secretions.

Adaptations

The ACBT is a flexible tool. You can do more than one set of deep breathes before huffing. Remember to use breathing to control in between.

Deep Breathing, coughing and pain control

Deep breathing is encouraged and this allows the lungs to expand. You need to be able to take a deep breath in and exhale without being in pain. If you find you are in pain when doing this you should report this to the nurse or doctor looking after you so that adequate pain relief is given.

Coughing helps to release secretions. It is perfectly safe to cough after major surgery and we advise that you hold your abdomen with your hand or a rolled up towel or pillow whilst coughing to support your abdominal wound. You will not cause yourself harm from coughing.

Mouthcare

Good oral hygiene is recommended as you are more at risk of a build-up of bacteria and this could lead to a chest infection. Teeth should be brushed twice a day. Please ask if you require assistance. Special mouth care products are available on the ward if needed.

Mobility

We encourage early mobilisation to help prevent the risk of chest infections, Deep vein thrombosis (DVT) and other post-surgical complications. You will be assisted out of bed the first day after your surgery and until you are able to do this yourself.

To help aid your recovery we advise you to sit out as much as possible. If you are in bed then you should try to sit up as this helps the lungs expand.

There are gentle exercises that can be followed to help strengthen your legs and prevent DVT. These can be performed in the bed, chair or standing.

Lying on your back, point and flex your toes.

Repeat.....times.



Lying on your back, squeeze your buttocks firmly together.

Hold for ten seconds. Repeat.....times.



Lying on your back, pull your toes towards you and brace your knees down firmly against the bed. Hold for ten seconds.

Repeat.....times.



Bend and straighten your leg, sliding your heel towards your bottom.

Repeat.....times.



Lying on your back, place a rolled up blanket underneath your knee. Push your knee down into the blanket and lift your heel off the bed.

Hold for ten seconds. Repeat.....times.



Lie on your back and pull your toes towards you. Tighten the muscles on the front of your thigh to straighten your knee and then lift the leg off the bed by approximately 20cm.

Repeat.....times.

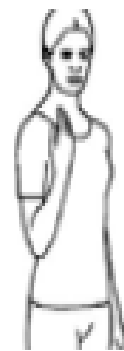


Lie on your back or sit in bed. Hold your hands together and raise your arms, aiming to get them above your head.



Repeat.....times.

Lie on your back or sit in bed. Bend your elbow aiming to touch your shoulder with your hand, keeping your elbow by your side.



Repeat.....times.

Lie on your back or sit in bed. Reach your arm straight up above your head.



Repeat.....times.

Lie on your back or sit in bed. Reach your arm straight out in front of you.



Repeat.....times.

Lie on your back or sit in bed. Reach your arm straight out to the side.



Repeat.....times.

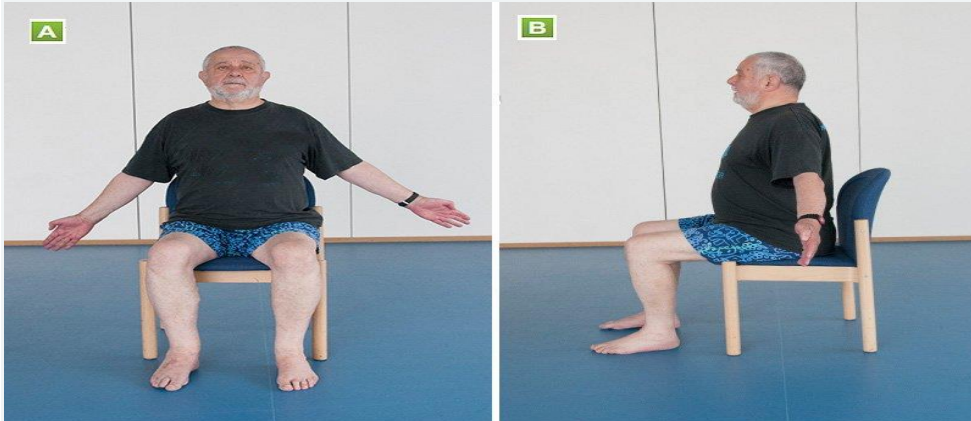
Lie on your back or sit in bed. Place your hand behind your head keeping your elbow out to the side.



Hold for.....seconds. Repeat.....times.

Chair exercises

Chest stretch



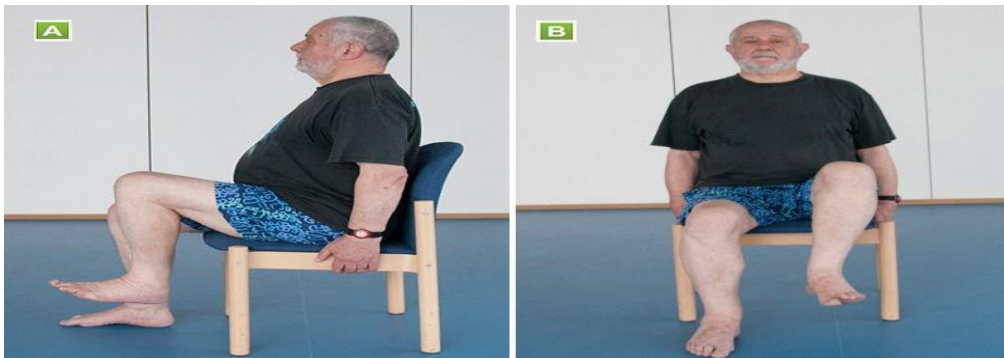
This stretch is good for posture.

A. Sit upright and away from the back of the chair. Pull your shoulders back and down. Extend your arms out to the side.

B. Gently push your chest forward and up until you feel a stretch across your chest.

Hold for 5 to 10 seconds and repeat 5 times.

Hip marching



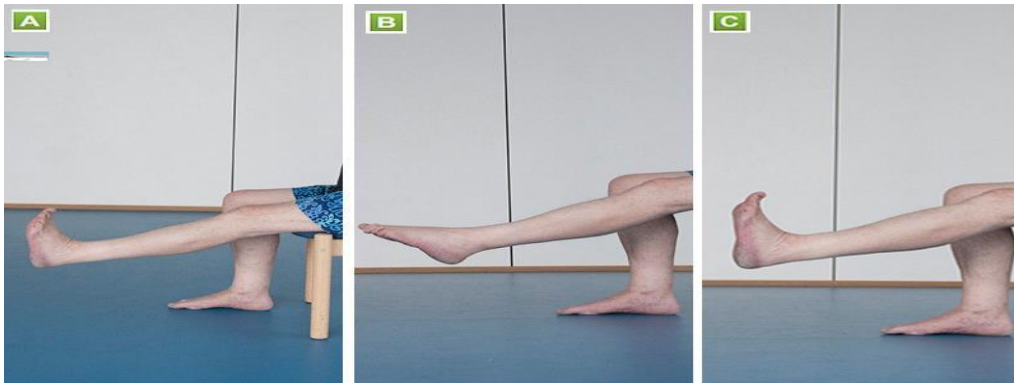
This exercise will strengthen hips and thighs, and improve flexibility.

A. Sit upright and do not lean on the back of the chair. Hold on to the sides of the chair.

B. Lift your left leg with your knee bent as far as is comfortable. Place your foot down with control.

C. Repeat with the opposite leg. Do 5 lifts with each leg.

Ankle stretch



This stretch will improve ankle flexibility and lower the risk of developing a blood clot.

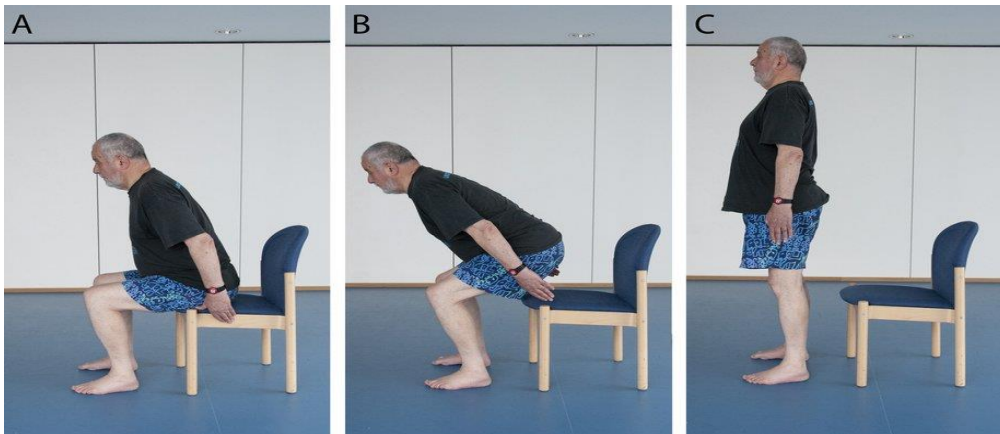
A. Sit upright, hold on to the side of the chair and straighten your left leg with your foot off the floor.

B. With your leg straight and raised, point your toes away from you.

C. Point your toes back towards you.

Try 2 sets of 5 stretches with each foot.

Sit-to-stand



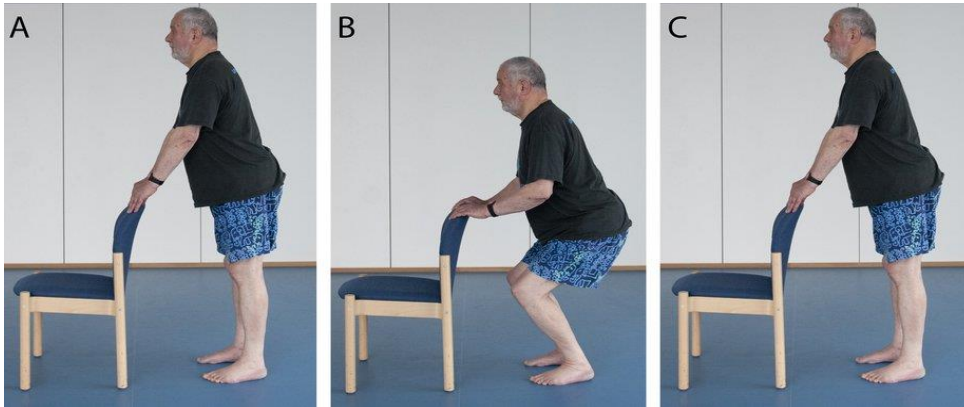
A. Sit on the edge of the chair, feet hip-width apart. Lean slightly forwards.

B. Stand up slowly using your legs, not arms. Keep looking forward and do not look down.

C. Stand upright and then slowly sit down, bottom-first.

Aim for 5 repetitions – the slower, the better.

Mini-squats



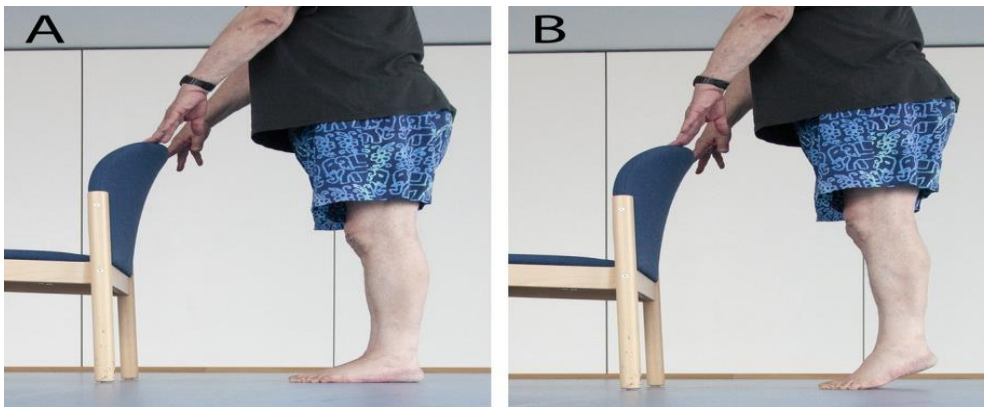
A. Rest your hands on the back of the chair for stability and stand with your feet hip-width apart.

B. Slowly bend your knees as far as is comfortable, keeping them facing forwards. Aim to get them over your big toe. Keep your back straight at all times.

C. Gently come up to standing, squeezing (clenching) your buttocks as you do so.

Repeat 5 times.

Calf raises



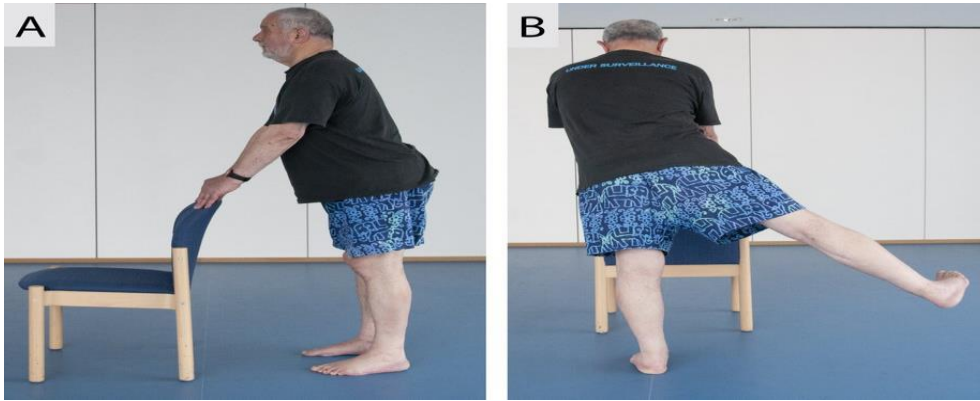
A. Rest your hands on the back of a chair for stability.

B. Lift both heels off the floor as far as is comfortable. The movement should be slow and controlled.

Repeat 5 times.

To make this more difficult, perform the exercise without support.

Sideways leg lift



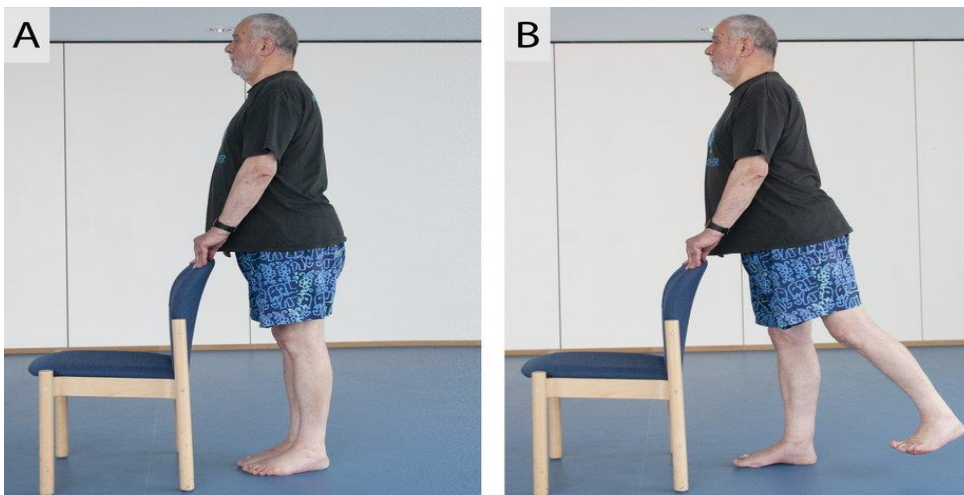
A. Rest your hands on the back of a chair for stability.

B. Raise your left leg to the side as far as is comfortable, keeping your back and hips straight. Avoid tilting to the right.

C. Return to the starting position. Now raise your right leg to the side as far as possible.

Raise and lower each leg 5 times.

Leg extension



A. Rest your hands on the back of a chair for stability.

B. Standing upright, raise your left leg backwards, keeping it straight. Avoid arching your back as you take your leg back. You should feel the effort in the back of your thigh and bottom.

C. Repeat with the right leg.

Hold the lift for up to 5 seconds and repeat 5 times with each leg.

Consent

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

Sources of information

ACBT adapted with consent from Kirsten Mitchell. Exercises adapted from www.nhs.uk/livewell/exercise/sitting-exercise

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team - Tel: 0300 131 4500 Ext: 135860 or by email: esh-tr.patientexperience@nhs.net

Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4500

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinicians have been consulted and agreed this patient information:
Jacinta Isles Matron Gardner Ward Conquest.
Kirsten Mitchell Physiotherapist.

The directorate group that have agreed this patient information leaflet:
DAS

Next review date: March 2023
Responsible clinician/author: Jacinta Isles Matron Gardner Ward Conquest.

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