Physiotherapy Department

Northwick Park Hospital - 020 8869 2229/2232
LNWHtr.PhysioAppointments@nhs.net

Post Covid-19 physiotherapy advice and exercise programme

As you recover from COVID-19, the information in this leaflet about breathing techniques, general mobility and strengthening exercises will help to improve your day-to-day function.

We recommend that you complete these exercises daily after you leave hospital.

If your symptoms do not get better within six weeks, please speak to your GP about this and, if appropriate, please ask them to refer you to outpatient physiotherapy for further rehabilitation.
## Contents

<table>
<thead>
<tr>
<th>Advice on common symptoms and self-care</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>• COVID-19 rehabilitation</td>
<td></td>
</tr>
<tr>
<td>• Fatigue</td>
<td></td>
</tr>
<tr>
<td>• Sleep</td>
<td></td>
</tr>
<tr>
<td>• Appearance</td>
<td></td>
</tr>
<tr>
<td>• Family relationships</td>
<td></td>
</tr>
<tr>
<td>• Mood</td>
<td></td>
</tr>
<tr>
<td>• Returning to normal life</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Active Cycle of Breathing Techniques (ACBT)</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Breathing exercises to help clear your chest</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exercise Booklet</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Exercise programme to maintain strength and function</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exercise diary</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Monitor your exercise compliance to keep you motivated</td>
<td></td>
</tr>
</tbody>
</table>

Post Covid-19 physiotherapy exercise programme
Produced: May 2020      Review date: May 2022   Reference: 152020
Advice on common symptoms and self-care

COVID-19 rehabilitation

COVID-19 is a new virus that has affected many people across the world, symptoms include:

- A high temperature- this means you feel hot to touch on your chest or back
- A new, continuous cough- this means coughing a lot for more than an hour, or 3 or more coughing episodes in 24 hours
- Less of taste or smell

At times people require admission into hospital for intensive care support to help with their breathing, this can cause some patients to experience muscle weakness, shortness of breath and fatigue. After you have been ill, especially for a long time, it is normal to take a while to feel like yourself again. How long this takes can vary from person to person. This booklet will address some of the common problems that people may experience and provide advice on how to deal with them.

Fatigue

Patients recovering from COVID-19 often experience a feeling of tiredness and exhaustion both physically and mentally caused by gentle exertion, this will improve in time.

During your illness you will probably have lost some weight and muscle strength, and your joints may be stiff. It is estimated that you will have lost 2% of your muscle mass each day during your illness. It is difficult to place a timescale on recovery as everyone recovers at a different rate, but you should not be concerned if it takes weeks or even months to get fully back to normal.

The only way to recover and to get stronger is to walk and exercise “little and often”. It is important to pace your activities so you don’t do everything in one go. Decide on the number of activities you need to do that day or even across the week, then make a plan to spread out the activities so you have adequate rest periods. Start with small goals and gradually increase the amount you can do as you feel able to do so.

You may have been doing exercises on the ward with the physiotherapists, and this booklet will provide you with more exercises for you to complete at home independently. As your strength returns you may want to take more vigorous exercise such as swimming, fast walking or cycling. If you want more specific advice before returning to other sports and activities, please speak to your GP.

Sleep

Whilst in hospital your usual sleep routine may have been disrupted by the busy environment, side effects of medications and care delivered to you night and day.

It is not uncommon for people to experience dreams related to their hospital stay which can seem very real and frightening. Problems with sleeping after you have left hospital are common and do get better with time. If these become particularly bothersome, please speak to your GP.
You may find that you become tired very easily and that you need to take naps in the day and go to bed early, you should follow your body’s needs. Sleeping too much during the day can mean that you are not tired at night.

You should find that as your activity levels increase, your sleep pattern returns to normal. The most important thing to remember is not to become worried about lack of sleep as this can make the problem worse. Try some relaxation techniques like mindfulness, meditation or even relaxing activities like listening to gentle music or reading a book before bed. It is best to avoid blue light from TV, phone and computer screens before bed as this can keep the brain alert.

**Appearance**

You may have noticed changes in your appearance such as hair loss or a change in the condition of your skin. If you have lost weight and muscle mass this can also affect your appearance. As your condition improves with diet, exercise, sleep and self-care, these problems should get better.

If you have any scars or wounds from treatments you may have received, these will fade with time and become less obvious. If these scars continue to bother you, please speak to your GP.

**Family relationships**

You may find family and friends react slightly differently to you and you might feel they are overprotective towards you. They will have been through a very anxious and stressful time, from which they will also need to recover. It can be helpful to talk about these feelings with each other to help you and your family come to terms with your period of illness.

**Mood**

Patients following a long stay in hospital may develop anxiety, low mood, depression, post-traumatic stress these are normal reactions to being critically ill. It is important to accept that it will take time to recover physically and psychologically.

It can be useful to set small realistic goals to help you see your progress and feel better in yourself. You may find keeping a diary helps with this process and remember to be patient with yourself and your recovery, as it make take some time.

It is important to speak with those you are close to but if the feelings continue, please speak to your GP who will advise you on different forms of treatment. You can also refer yourself for psychological support through Improving access to psychological therapies (IAPT):

www.cnwtalkingtherapies.org.uk
Brent talking therapies – 020 8206 3924 cnw-tr.brent.iapt@nhs.net
Harrow talking therapies – 020 8515 5015 harrow.iapt@nhs.net
Sexual health

Many people worry about when it is safe to resume sexual activities. This should be gradual and will depend on how you are feeling.

Returning to work

It may take some time before you are well enough to return to work. Your GP will continue to care for you once you are at home, and will be able to advise you when you may be ready to return. If your employer has an occupational health department then it can be helpful to speak to them as they may have a return to work scheme.
The Active Cycle of Breathing Techniques (ACBT)

People with a lung problem often cough and produce more phlegm (sputum) than is usual. It is important to remove sputum from your lungs to help you breathe more easily, prevent chest infections and reduce bouts of coughing. Leaving sputum in your chest can make your condition worse.

The Active Cycle of Breathing Techniques (ACBT) is one way to help you to clear your sputum from your chest. ACBT is a set of breathing exercises that loosens and moves the sputum from your airways. It is best to be taught ACBT by a physiotherapist.

The ACBT exercises are breathing control, deep breathing and huffing which are performed in a cycle until your chest feels clear.

Breathing control

Breathing control is breathing gently, using as little effort as possible.

- Breathe in and out gently through your nose if you can. If you cannot, breathe through your mouth instead
- If you breathe out through your mouth, purse your lips like you are blowing out a candle
- Try to let go of any tension in your body with each breath out
- Gradually try to make the breaths slower
- Try closing your eyes to help you to focus on your breathing and to relax

Breathing control can also help you when you are short of breath or feeling fearful, anxious or in a panic.

Deep breathing exercises

Take a long, slow, deep breath in, through your nose if you can. Try to keep your chest and shoulders relaxed. Breathe out gently and relaxed, like a sigh. You should do three-five deep breaths. Ask your physiotherapist to help you choose the right number of deep breaths for you. Some people find it helpful to hold their breath for about two-three seconds at the end of the breath in, before breathing out. Try the deep breathing exercises both with and without holding your breath and see which works best for you.

Huffing

A huff is exhaling through an open mouth and throat instead of coughing. It helps move sputum up your airways so that you can clear it in a controlled way. To “huff” you squeeze air quickly from your lungs, out through your open mouth and throat, as if you were trying to mist up a mirror or your glasses. Use your tummy muscles to help you squeeze the air out, but do not force it so much that you cause wheezing or tightness in your chest. Huffing should always be followed by breathing control. There are two types of huff, which help to move sputum from different parts of the lungs.

The small-long huff

This will move sputum from low down in your chest. Take a small to medium breath in and then huff (squeeze) the air out until your lungs feel quite empty, as detailed above.
**The big-short huff**

This moves sputum from higher up in your chest, so use this huff when it feels ready to come out, but not before. Take a deep breath in and then huff the air out quickly. This should clear your sputum without coughing.

**How do I know I am huffing correctly?**

Your huff should move the sputum in your chest by making it “rumble” or “rattle”. This will mean you are moving the sputum up the airways, and it should then clear easily. If you are wheezing with each huff you may be huffing too hard or for too long.

Make sure you do not huff too hard and always do some breathing control after each two huffs.

If you find it hard to keep your mouth and throat open when huffing, you may find it useful to use a small tube (e.g. the mouthpiece for a peak flow meter) when practising. Ask your physiotherapist to show you how.

**Putting it together to form a “cycle”**

Your physiotherapist may adjust the Active Cycle of Breathing Techniques to suit your need.
When should I cough?

If huffing clears your sputum you should not need to cough. However if it does not clear your sputum, then you may need to. You should only cough if the sputum can be cleared easily. It is very important to avoid long bouts of coughing as these can be very tiring and may make you feel breathless, or make your throat or chest sore or tight.

How often do I need to do ACBT?

Clearing your chest should be done often enough to keep it reasonably clear between doing the exercises. When you are well you may need to do ACBT only once or twice a day. When you have more sputum, you may need to do it more often. When you are unwell or have more sputum, you may need to do shorter and/or more frequent sessions.

When should I do my breathing exercises?

You should do your exercises when it is easiest for you to move the sputum from your chest, or if you feel sputum has built up in your lungs. The first sign may be that you feel more breathless or that you are coughing more. It is also important to try and fit your breathing exercises around your life and your daily routine, so that you are able to do them regularly.

Try to avoid doing ACBT straight after a meal. You should discuss this with your physiotherapist.

How long should I do ACBT for?

You should aim to continue your exercises for about 10 minutes and ideally until your chest feels clear of sputum.

What position should I do ACBT in?

The best position for you to do the ACBT in will depend on your medical condition and how well it works for you. It can be done in a sitting or a postural drainage position, as advised by your physiotherapist. Whatever position you use, make sure you are comfortable, well supported and relaxed. If you have any questions about the information in this leaflet, please contact your physiotherapist or email us at LNWH-tr.PhysioAppointments@nhs.net.

Useful contacts

Association of Chartered Physiotherapists in Respiratory Care
www.acprc.org.uk

British Lung Foundation
www.lunguk.org

Chartered Society of Physiotherapy
www.csp.org.uk

British Thoracic Society
www.brit-thoracic.org.uk

Asthma UK
www.asthma.org.uk
Exercise booklet

In order to improve your physical strength and function, we recommend you do not stay in bed all day, try to sit in a chair for meals and activities and go on short walks. Try to complete between five and twenty repetitions of each exercise daily. You can increase or decrease the number of repetitions depending on how you are feeling that day but try to progress the number of repetitions each week.

Seated knee extension

- Sit upright on a chair.
- Start with your knee bent.
- Lift your foot in the air and straighten your knee.
- **If you find it too easy** - hold the leg up for 10 seconds.

Seated hip flexion

- Sit upright on a chair.
- Start with both your feet on the floor.
- March your legs by lifting one knee up and down – alternate between your right and left legs.

Sit-to-stand

- Stand up and sit down from a chair without using your arms to help.
- **If you find it too easy** - lower the height of the chair or bend your legs until your bottom just touch the seat and then stand back up.
- **If you find it too hard** - increase the height of the chair.
Shoulder press

- Sitting or standing, start with your elbow bent and your fist facing up.
- Punch to the ceiling, straightening your elbow.
- **If you find it too easy** – hold a weight in your hands, such as a tin of beans or peas.
- **If this exercise is too hard** – just bend and straighten your elbows.

Shoulder strengthening

- Sit upright on a chair or stand with your arms by your side.
- Lift your arm sideways to shoulder height and slowly back to your side.
- **If you find it too easy** – hold a weight in your hands, such as a tin of beans or peas.

Seated tricep dips

- Sit upright on a chair with your hands on the arm rest.
- Push through your hands to straighten your elbows and then slowly return to the starting position.
- **If you find it too easy** – move your feet further away.
Bridging

- Lie on a bed on your back with your knees bent.
- Squeeze and lift your bottom off the bed.
- **If you find it too easy** – perform the exercise using one leg.

Sideways leg lift

- Lie on a bed on your side.
- Bend your bottom leg and keep your top leg straight.
- Lift the straight leg up towards the ceiling.
- Slowly lower the leg down towards the bed.
- **If you find it too easy** – hold the leg up for 10 seconds.

Straight leg raise

- Lie on a bed on your back.
- Keep one leg straight and lift it off the bed.
- Repeat on both sides.
- **If you find it too easy** – hold the leg up for 10 seconds.
**Standing leg exercises**

- Stand with your feet together holding onto a firm chair for support.
- Lift your outer leg out to the side.
- Slowly return back to the starting position.
- Repeat the exercise by lifting the leg backwards or lifting the knee up forwards.
- **If you find it too easy** – repeat the movements without holding onto the chair.
<table>
<thead>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wk 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wk 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
General Trust information

Patient Advice and Liaison Service (PALS)

PALS is a confidential service for people who would like information, help or advice about the services provided by any of our hospitals. Please call 020 8869 5118 between 9.30am and 4.30pm or e-mail LNWH-tr.PALS@nhs.net Please note that this service does not provide clinical advice so please contact the relevant department directly to discuss any concerns or queries about your upcoming test, examination or operation.

If you would like this information in an easy to read format, large print, braille, different format or language, please contact the PALS team on 020 8869 5118 or email lnwh-tr.PALS@nhs.net We will do our best to meet your needs.