



## Steroids, Muscle Weakness and Exercises

### What are steroids?

Steroids (sometimes called corticosteroids) are produced naturally by the adrenal gland. They help control many different functions in our bodies, like the way the body uses fats, proteins and carbohydrates, regulate our immune system and the balance of salt and water in our bodies and help to reduce inflammation. Steroids can be manufactured synthetically as drugs. There are different types of steroids and they all have different effects on the body. Common types of steroids used in palliative care are hydrocortisone, dexamethasone and prednisolone.

Steroids can be used for the management of various symptoms:

- Pain and breathlessness
- Improving appetite, nausea, and vomiting
- Easing compression of your spinal cord
- Improving mood and feelings of wellbeing
- Reducing swelling in the brain to ease headaches

As with any medication there are potential side effects of steroid use (please see list enclosed with your medication), however, the benefits usually outweigh the risks associated with their use. This leaflet focuses on the side effect of muscle weakness.

### Muscle weakness

Any patient on steroids is at risk of developing muscle weakness which develops more quickly if you are malnourished, an older patient, or if you have cancer. Chronic steroid-induced weakness usually occurs after weeks or months of treatment and may impact on functional activities. Muscle

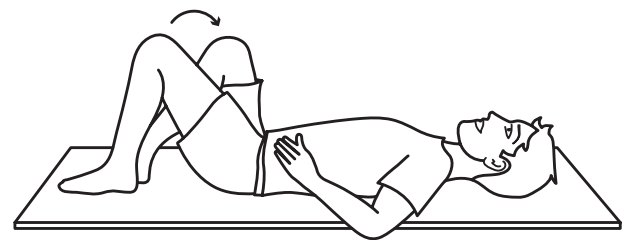
weakness usually occurs symmetrically, and may affect your proximal muscles which are your core trunk, shoulder, hip, upper leg, bottom and respiratory muscles. If you are feeling unwell, you may not be able to exercise as usual, so your focus should be on maintaining function and safety.

### Exercises

These exercises help strengthen the main muscles that are normally affected. Little and often is the key. If possible, try some of these exercises 2 to 3 times a day, for 3 to 5 repetitions. Please consult with your physiotherapist about which exercises are appropriate for you, or to ensure you are doing them correctly. Initially they may be difficult to do, but any qualified physiotherapist will be able to help.

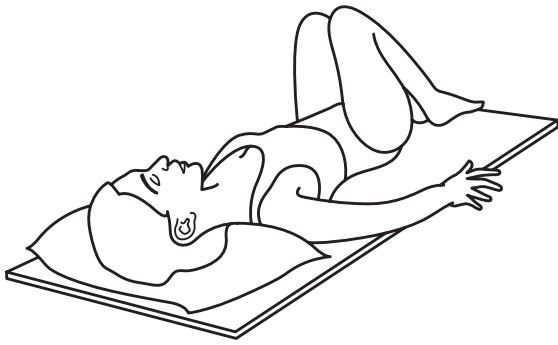
### Core muscles (trunk muscles)

If you are unable to lie flat, find a comfortable position that works for you.



1. Lying on your back with your knees bent. Find the bony part of your pelvis, move one inch in and feel the muscle under your fingers. Slowly and gently pull your lower stomach in. Breathe normally. Keeping these muscles gently tight, slowly drop one knee out to the side, and do not allow your pelvis to move. Then bring the leg back to the middle. Repeat with the other leg.

Repeat \_\_\_\_\_ times

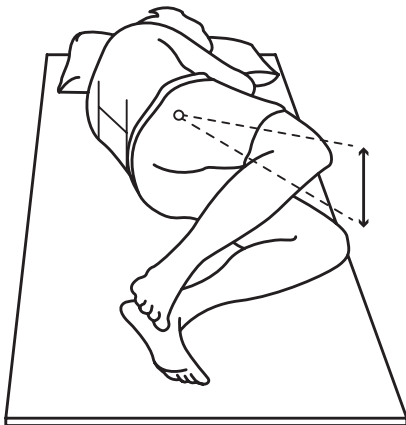


2. Start position: same as above. Gently roll your knees to one side, moving only as far as you feel is comfortable. Return slowly to the middle and repeat to the other side.

Repeat \_\_\_\_\_ times

## Legs and bottom muscles

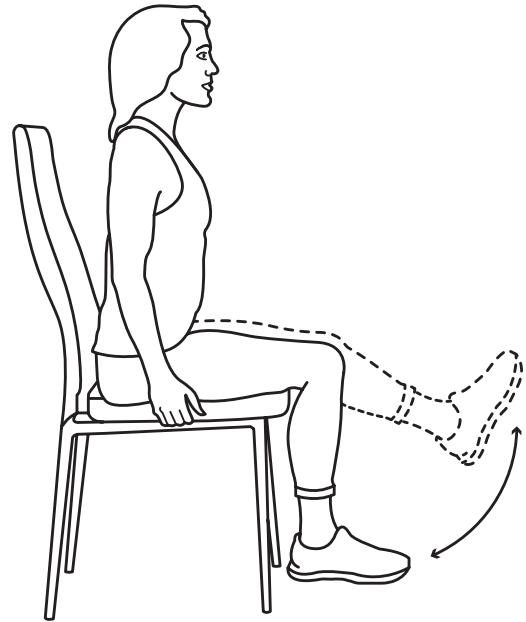
3. Lie on your side with a pillow under your head and your hips rolled slightly forward. Tighten your tummy and bottom muscles. Keeping your feet together, separate your knees about three inches. (Do not let your pelvis rotate backwards). Hold for up to five seconds.



Repeat \_\_\_\_\_ times

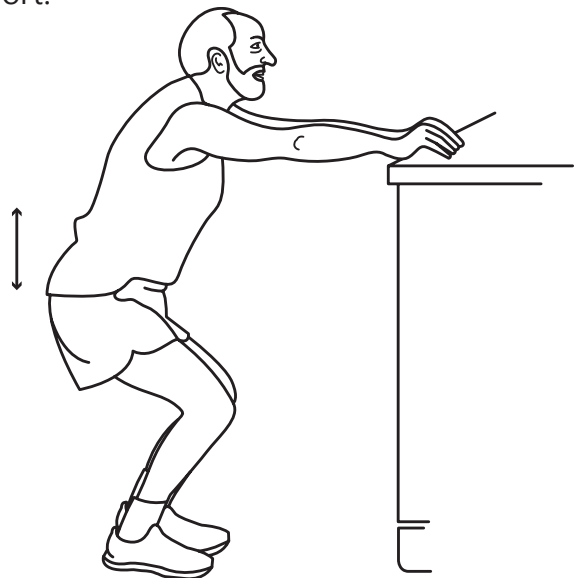
4. Practise tightening your buttocks throughout the day. You can do this while standing or sitting. Hold for up to ten seconds and repeat throughout the day.

5. Sitting over the edge of a bed or chair, straighten your knee, lifting your heel off the floor. Hold for up to five to ten seconds.



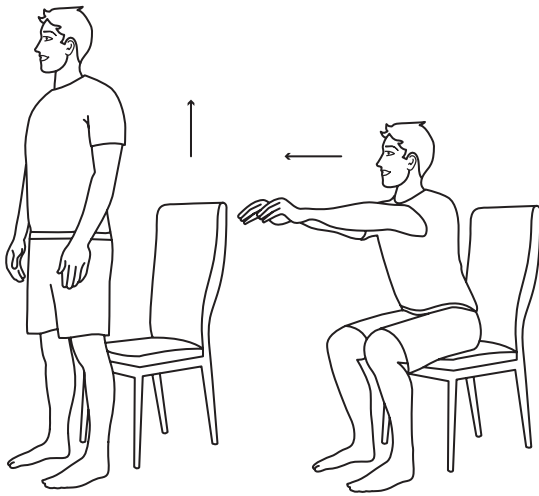
Repeat \_\_\_\_\_ times

6. Stand with your feet hip-width apart, feet facing forwards. Slowly squat down a small way, sticking your bottom out and ensuring your knees do not fall in. Slowly straighten up. Hold on to the back of a chair/your kitchen work surface if you need support.



Repeat \_\_\_\_\_ times

7. Stand up and sit down slowly on a chair. Use your arms to help you if needed. Always ensure you feel safe. Do not flop into the chair. Control your descent.



Repeat \_\_\_\_\_ times

## Shoulder exercises

Shoulder strengthening exercises need to be taught in person by a qualified physiotherapist, to ensure your technique is accurate and at a level appropriate to you. If you would like shoulder exercises from a physiotherapist, please ask your Clinical Nurse Specialist, GP or consultant to refer you.

## Respiratory muscles

Sitting down, place one hand on your tummy, and one hand on your chest. As you breathe in from your tummy, your tummy should swell out and expand as much as possible against your hand. The hand on your chest should remain relatively still as you should be breathing from your belly, not the tops of your lungs. If this is challenging at first, it can be helpful to first try this exercise lying down with one hand on your heart, the other hand on your abdomen. Watch the hand on your abdomen rise as you fill the bottoms of your lungs with air (inhale). The hand over your heart should barely move, if at all. Aim to do this exercise for one to two 2 minutes for two or three times a day.



## Aerobic activity

Any activity that increases your heart rate and makes you breathe more deeply and at a faster pace will help your breathing muscles (walking at pace, cycling, or using stairs). If you would like to progress these exercises further, please ask to see a physiotherapist. Please do not make any changes to your medications without consulting your GP, Clinical Nurse Specialist or consultant. You could keep an exercise log to track your progress and show which exercises are particularly difficult for you or require further assistance. It can also be really good motivation to continue with your daily exercises.

Day	Exercises complete	Repetitions (times taken)
M		
T		
W		
T		
F		
S		
S		

All information is correct at time of print and may be subject to change. Please visit our website for the most up-to-date information. If you have any feedback or would like this information in a different format or language, please contact us.