



*Physical activity
following open heart
surgery*

Patient information booklet

Physiotherapy following cardiac surgery

The physiotherapist plays an integral role in the team approach to your care following your operation. The physiotherapist will explain their role in your care and inform you of the expected progress after surgery. Immediately after the operation, they will help you with clearing sputum and aerating your lungs. You may find it painful to breathe deeply and to cough, and this can lead to problems with the lungs – that is why the physiotherapist works with you to ensure the lungs are working properly as soon as possible after the operation. Early mobilisation and breathing exercises will assist in sputum clearance and aeration of the lungs.

Due to the nature of the surgery, many patients experience some degree of soreness and stiffness in the back, neck, shoulders and chest. The physiotherapist will show you a series of mobilising exercises to assist you to loosen up all those stiff joints and muscles. To familiarise yourself with the exercises that are prescribed for you, they are included here, however you should wait until the

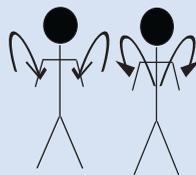
physiotherapist tells you that you are ready to commence them.

Physiotherapy exercises following open heart surgery

The following exercises should be done twice daily until you no longer feel restriction with any body movements.

Most exercises are done while sitting on a kitchen chair. The back should be straight and feet together and flat on the floor with your knees pointing straight forward.

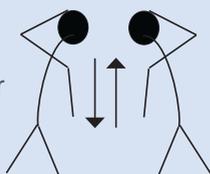
1. Arms resting on your lap, circle your shoulders forward 6 times and then backwards.
Repeat 6 times.



2. Place your hands together in front of you with your elbows straight. Raise your hands slowly above your head, keeping your arms as close to your head as possible, then lower them. Take a deep breath in as you raise your hands and breathe out slowly as you lower. *Repeat 6 times.*



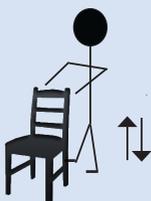
3. Place your right hand behind your head, keeping your elbow back, and let your left hand hang over the side of the chair. Bend your body sideways to the left, reaching the floor if possible. Focus your eyes straight ahead so as not to lean forward. Repeat to the other side. *Repeat 6 times.*



4. Place your locked hands at the back of your neck, with elbows out, then bring them together in front. *Repeat 6 times.*



5. Standing up, hold onto the back of your chair and come up onto your toes lifting your heels off the floor, and lower again. *Repeat 6 times.*



the breastbone and people often do this by subconsciously hunching their shoulders forwards and slouching. Continued bad posture will lead to neck, shoulder and back pain – your physiotherapist will be able to assist you with advice regarding your posture. The physiotherapy exercises will help restore your body's natural posture.

Points to remember

1. Be aware of your posture.
2. Do not slouch when you are sitting in a chair.
3. Stand up straight and keep your shoulders back when you are walking around.
4. Listen to any additional advice that your physiotherapist may give you while you are in hospital.

Physical activity

Returning to physical activity regardless of the intensity of the exercise can be a nervous experience for cardiac patients following open heart surgery. Your physiotherapist is an expert in the area of exercise and rehabilitation

Posture

Following surgery it is very easy to develop bad postural habits. It is natural for you to want to protect

and will be working with you while you are in hospital to commence a regular walking program.

Walking programs

Lack of exercise is one of the risk factors for heart disease. If managed, it can help you to control several other risk factors such as being overweight, high blood pressure and high cholesterol. Exercise is also known to reduce stress levels and generally help people feel better about themselves.

Walking is both an easy and inexpensive way of starting a regular exercise regime or for those people already exercising prior to surgery, a way of returning to a satisfying level of activity.

Walking will improve your aerobic fitness which is the sort of fitness heart patients benefit from most. Three levels of walking programs are included in this section – your physiotherapist will indicate which program will best suit you. Certain guidelines for exercising should be remembered so that you are able to exercise safely. These are outlined below.

Exercise guidelines following cardiac surgery

Returning to a regular exercise regime or starting a regular exercise program is extremely important following your open heart surgery. Exercise is essential to prevent complications after surgery and also to help prevent another cardiac event in the future.

1. Walk at a moderately brisk pace. You should feel that you are breathing a little faster than normal, but you should be able to walk and talk to someone at the same time. If you are too breathless to do this, SLOW DOWN OR STOP AND REST.
2. Do not walk immediately after a heavy meal – wait for approximately 1 hour.
3. Never exercise if you are feeling unwell – your body is already working hard to cope with an illness.
4. During warm weather, exercise in the morning, late afternoon or evening to avoid the heat of the day.
5. You may experience some chest soreness while exercising. This is

not uncommon and is most likely coming from your breastbone as it heals. If however the soreness is similar to your previous angina pain, *stop and rest and then contact your local doctor at the first opportunity.*

6. Take note of how you feel each day following your walk. If you are still tired the next day try a shorter distance. If you feel fine you can try walking further than the day before.
7. Try to combine your walking program into your everyday lifestyle, e.g. walk to the local shops rather than drive, take the stairs rather than the elevator, get off the tram/bus a stop earlier and walk the rest of the way or park the car further away in the shopping centre car park.
8. Initially avoid any heavy lifting – this places stress on your sternum (breastbone). It is recommended by the surgeons that for the first 8 weeks following surgery you lift no greater than 5kg (10lbs). If you can, divide loads into smaller ones.
9. If you have any further queries about exercise and activity please do not hesitate to contact us here at St Vincent's or alternatively talk to one of your Cardiac Rehabilitation Program team members.
10. And remember, WALKING IS THE BEST EXERCISE FOR YOU.

Moderate walking program

This program is meant as a rough guide only. You should adapt it to your particular circumstances. For example, if you live in a very hilly area you will need to reduce the time you walk due to the extra effort required up the hills. If you have arthritis or other conditions limiting your mobility, these factors also need to be taken into account.

Week 1 (2 x daily)

– Walk 10 minutes. How do you feel?

Week 2 (2 x daily)

– Walk 20 minutes. How do you feel?

Week 3 (1 x daily or 2 x daily if you wish)

– Walk 30 minutes. How do you feel?

Week 4 (1 x daily or 2 x daily if you wish)

– Walk 40 minutes. How do you feel?

NB. Regular walking is advisable in order to achieve the long term benefits of a) improving cardiac efficiency and b) improving coronary blood flow, i.e. the blood supply to the heart itself.

Every week continue to walk at least 20–30 minutes at least 5 days per week, but walking every day is even better.

Other physical activity

There are numerous types of physical activity from jobs around the home to gardening, driving, resuming sexual relationships, lifting and even returning to work.

Lifting

It is important that you refrain from lifting for 6–8 weeks following your surgery. The sternum takes this length of time to ‘knit’ and heal properly. Lifting anything heavy during this

period will not only cause you considerable discomfort and soreness but may do some damage to the sternum.

The surgeons recommend lifting no more than 5kg (10lbs) for this initial period. When you are lifting it is important to USE BOTH ARMS and maintain good lifting posture. It is important to remember though that you should return slowly to lifting once this period is over, as your muscles will not be used to lifting and will be de-conditioned. Slowly increasing the weights you lift will ensure minimal discomfort. Often your cardiac rehabilitation will include light hand weights as part of the program to help in this retraining.

Driving

For many people, driving provides the independence to go where you want to, when you want to. However FOR THE FIRST SIX WEEKS YOU SHOULD NOT DRIVE A CAR. There are a number of reasons why this is the case:

1. The sternum is still healing and therefore any strain or stress on it could cause pain and discomfort. This will occur when steering the

car and sometimes even when changing gears. In an emergency situation you may not be able to respond quickly enough.

2. Your eyesight can be affected following the surgery for a short period – this will obviously affect your ability to judge distances. Concentration can also be sluggish for a while after the operation.

Some insurance companies have a clause in their contracts regarding open heart surgery patients. It is advisable that you check your cover before thinking about driving.

NB. You are not exempt from wearing a seat belt. Put a pillow between the belt and your chest if it is uncomfortable.

Resumption of activities

Over the next two or three months you will slowly be able to return to the day-to-day activities that you were undertaking before the operation. The activity guidelines listed below are designed to give you some strategies for returning to activities after your surgery. Please ask your physiotherapist when it would be safe to resume your particular activity.

The period of abstinence from driving is a perfect opportunity for you to concentrate on your walking program and other exercises. Should you have any questions regarding driving, you can speak to your physiotherapist or your surgeon.

Activity guidelines after cardiac surgery

Following cardiac surgery it is important to return to a normal lifestyle as soon as possible. Certain activities however should be avoided for a short while. These time frames refer to the time needed for the sternum to knit together following your operation.

Activities following surgery

Week 1

- Watering the garden with a hose

Week 2

- Hand washing the dishes

Week 3

- Hanging out light clothes
Drop the line to a suitable height and don't carry a full basket of clothes

Week 4

- Gentle weeding
Make sure you get up and down from the ground without pushing on your arms

Week 6

- Vacuuming/sweeping carpets
- Driving
You must wait at least 6 weeks because turning the steering wheel strains your breastbone and your concentration and judgment will be affected for a few weeks
- Golf
Putting: you need full movement before you start your swing; you can start with a few holes after 6 months
- Lawn bowls
Start with just an hour of social bowls
- Swimming
You should swim in a heated pool; your wounds must have completely healed; have someone with you for safety

3 months

- Heavy gardening, digging or mowing

Long-term

- Tennis, squash, skiing and running
Avoid for several months and check with your cardiologist before proceeding

Cardiac rehabilitation

Following open heart surgery it is important that you and your family are able to return to an active and satisfying lifestyle. People are often unsure about what they are able to do and how much is okay. This often leads to anxiety and some depression.

During your short stay in hospital it is impossible to give you all the information you need to return to a healthy and active lifestyle, and this is where cardiac rehabilitation comes in. Cardiac rehabilitation (CR) describes all measures used to help cardiac patients return to an active and satisfying life, and to prevent recurrence of cardiac events.

The aims of cardiac rehabilitation are:

1. To maximise physical, psychological and social recovery so that patients can achieve a lifestyle that is

as productive and personally satisfying as possible.

2. To encourage the adoption of a lifestyle that limits the progression of atherosclerosis and minimises the risk of further cardiac events. This is known as secondary prevention.
3. To assist patients to become physically active at a level which is compatible with their ability to exercise.
4. To encourage patients to use appropriate health and community services. Cardiac rehabilitation programs complement and reinforce the medical care from cardiac surgeons, cardiologists and GPs in rehabilitating their patients.

Cardiac rehabilitation (CR) program

A CR program is an organised approach to achieving the aims of cardiac rehabilitation. The program will be an adjunct to the medical care you receive from your general practitioner, cardiac surgeon and cardiologist after your discharge from hospital.

Phases of cardiac rehabilitation

Phase 1: Inpatient

Phase 2: Outpatient

Phase 3: Community-based general exercise program

1. Inpatient program

Rehabilitation starts in hospital in the form of gentle return to walking and inpatient information sessions. These are aimed at reducing your anxieties about going home and giving you confidence and guidelines about returning to normal activity levels. Individual sessions are held with your physiotherapist and dietitian. These sessions provide the perfect opportunity for you and your family to ask any questions you may have.

2. Outpatient program

As mentioned previously, it is not possible to give you all the information you need during your short stay in hospital. The National Heart Foundation has encouraged outpatient cardiac rehabilitation programs so that cardiac patients are given the opportunity to participate actively in their rehabilitation process.

Usually the CR program will run for approximately six to eight weeks. There is usually one session per week for that period. There are over 70 programs all over Victoria making access to cardiac rehabilitation relatively easy.

The structure of most CR programs is such that there is an exercise component and a large emphasis on discussion and education. The education relates to different aspects of your recovery and to coronary heart disease in general. There is a lot of support and the rehabilitation team is always available to answer your questions and to address your concerns.

Your physiotherapist at the Cardiothoracic Care Centre will discuss your cardiac rehabilitation and where your referral will be made for you to attend the outpatient program. The Cardiac Rehabilitation Coordinator for St Vincent's is one of the physiotherapists working on the Care Centre.

If you have not heard from your CR referred centre two weeks after discharge, please contact:

The CR facility to which you were referred; or

St Vincent's CR Coordinator
Tel: (03) 9288 2211, pager 108; or

The National Heart Foundation
Tel: 1300 362 787

3. Community-based general exercise program

This will be decided once you have completed Phase 2. Please talk to your cardiac rehabilitation coordinator for further information.

Notes

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St Vincent's

*Continuing the Mission of
the Sisters of Charity*

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Mission

Our health service is based on and driven by our quest for:
Compassion – Justice – Human Dignity – Excellence – Unity