



Heart Attacks and Exercise afterwards

Heart attack

The following terms essentially mean the same thing as heart attack: **coronary**, **coronary thrombosis**, **infarct**, and **myocardial infarction** MI (which really means destruction of an area of heart muscle as a result of obstruction of a coronary artery).

A **heart attack** is the effect of an artery becoming blocked or significantly narrowed by a clot forming in a **coronary artery** – one of the arteries supplying the heart. The clot interrupts blood flow to the heart muscles, so an area of heart muscle is deprived of adequate blood. This may cause permanent scarring and damage to an area of the heart muscle.

This causes a lack of oxygen in a part of the heart, which then becomes less able to work effectively and scarred – possibly permanent scarring in the affected area. Adverse chemicals build up, and pain is felt. The rest of the patient's heart now has to work harder to get used to the extra workload.

This clot may occur suddenly. The patient feels a persistent vice-like central chest pain, which may spread to the left arm and/or the neck and jaw; is breathless; may suddenly faint or collapse; and has rapid or weakening pulse. Unlike **stable angina** the pain does not ease when the patient is at rest. Some people have a 'silent' heart attack in which they feel no pain.

In a **heart attack** the patient's heart does *not* usually completely stop beating. The heart attack may cause permanent scarring and damage to an area of the heart muscle.

The warnings of a possible heart attack are:

- chest pain
- breathlessness
- palpitation – irregular heart beating
- blackouts – momentary fainting or sudden collapse
- People may feel washed out, or that things are an effort, or their legs feel heavy.

However, some of these symptoms often have other causes, which a doctor can distinguish and diagnose.

Heart attack first aid treatment

Do the appropriate first aid if you have done a course. Otherwise do as follows.

- If the casualty is unconscious: call 999 for ambulance saying urgent; do **Cardiopulmonary resuscitation** without delay.
- If he or she is conscious: ask for consent if needed; help the patient into a comfortable position; help with **glyceryl trinitrate** – GTN – if they have some; call 999 for ambulance; do not give food or drink.

Heart attack – While in hospital

Suppose you have been admitted to hospital with a suspected heart attack. In the Coronary Care Unit you will be attached to a monitor for a few days so that the staff can keep check on your heart from the nurses' desk.

You may be in hospital for five to seven days and during this time you will be advised how to gradually increase your level of activity. Every individual is different and the nurses will advise you each day as to how much you can do. You should also have an opportunity to see a consultant cardiologist.

Your visitors may be restricted while you are in the Coronary Care Unit, so that you do not become overtired or overexcited. It is sensible to continue this when you first get home.

On day 1 you will be advised to stay in bed and encouraged to rest until your chest pain and/or shortness of breath has subsided. It is essential to rest in order to let your heart recover from the original shock of the heart attack.

On day 2 strict inactivity is still advised. You may be able to sit out for brief periods of 2-3 hours twice a day and perform mild activities – such as washing and gentle exercises of the feet, ankles and legs. Otherwise you should try to rest and relax. If you are pain free and the nurse advises, you may be able to walk to the toilet.

On day 3 if you have had no pain you should be able gradually to increase your mobilization, walking to the toilet and washroom and around the bed area. You may be able to sit out in the chair for longer periods of up to 3 or more hours twice a day. You should be able to have a full wash with assistance if required. It is advisable to rest after washing and meals.

After the minimum time in the Coronary Care Unit for your essential care, you may be moved to another ward to free the CCU beds for other patients.

On day 4 if you have no pain you should be able to walk around the bay and take a gentle walk down the main ward corridor to the day room, resting there before you return to the bay.

On and after day 5 you should be able to walk to the day room and freely around the ward with no pain or shortness of breath. If you have stairs at home, you should try and climb some under the supervision of a nurse or physiotherapist before you are discharged home.

Discharge from hospital and medication

On leaving hospital you will be given a supply of your medication.

Patients sometimes have [angina](#) chest pain after a heart attack. You may be given a supply of [glyceryl trinitrate](#) GTN tablets or spray, which you should carry with you at all times.

Before you leave hospital you should understand when and how to take your medication. If you are unsure, please ask the nurse to explain. You will be given a letter to give to your GP. Repeat prescriptions can be obtained from him or her. It is important not to stop taking your medication without first consulting your doctor.

If you require a sickness certificate this can be obtained from the nurse in charge on your day of discharge at the hospital. Thereafter your GP will give you follow on certificates.

During the first three days at home walk about the house and garden for the same amount of time as on your last day in hospital. Climb one flight of stairs slowly only two or three times a day if you feel able.

After the third day walk outside the house 100 yards at first. Increase each subsequent walk by 100 yards provided no chest pain or shortness of breath results. Do not go out on cold or windy days. Delay walking for 30 minutes after eating a meal.

During the second week take up light household chores, eg drying up or peeling vegetables. It may help you not to over-tire yourself if you sit down to perform such tasks. You should refrain from any chores involving lifting, pushing, pulling or stretching.

Sexual intercourse is probably best avoided during the first two weeks after discharge but thereafter, as you return to physical health, no restriction is usually necessary. Intercourse is a normal part of life, do not avoid sex as this may lead to unnecessary frustration and reduce your enjoyment of life. If you have chest pain during sexual intercourse you should consult your doctor.

You should be able gradually to increase your level of activity over the next six to ten weeks until you get back to normal. During the third and subsequent weeks expect to be able to walk a reasonable distance at a steady pace without difficulty. Gradually increase the level of exercise if you feel able. It is beneficial to continue to take regular exercise.

If you are employed you will be off work typically for eight to twelve weeks. When you first return to work it is advisable to do so on a part-time basis to give yourself a chance to get used to your increased level of activity. If your work involves heavy lifting you may need to stay off work longer. You can ask the advice of your GP or of the doctor at your outpatient appointment.

The DVLC medical advisers state that after a heart attack or heart operation people should not drive for at least one month. According to their recommendation, you may keep your ordinary driving licence unless:

- you have angina at rest or when driving, or
- you have sudden and disabling attacks of dizziness, falling, loss of awareness, confusion or fainting.

People with heart conditions are legally required to inform the DVLC at Swansea if their condition worsens or if they develop another medical condition that affects their ability to drive safely. Different rules apply to HGV licence holders. The DVLC can supply further information on request.

Patients who have had a heart attack are usually advised not to fly in a commercial aircraft or take long car or train journeys for six to eight weeks after leaving hospital.

If travelling abroad, take two sets of medicines – one in your hand luggage and the other in the main luggage. Also take first aid items.

By the end of the second month most patients are able to do exercise much as they did prior to their heart attack. However, if your sport is particularly strenuous, ask for advice from your GP or the doctor at your outpatient appointment. When your heart has fully recovered it is important to keep fit and take regular exercise.

After a heart attack you should aim to lead as normal a life as possible and remain fit and well. An obvious question is 'Is it likely to happen again?' Your consultant will be thinking of this from day one and will be assessing you in order to minimize the risk of further events. The exercise stress test during your convalescence is an important part of this assessment.

If you have more chest pain you should stop whatever you are doing, sit down and rest. Your mobilization programme may need to be reviewed. Chest pain is your heart's way of telling your body to slow down. Be patient and don't worry. You should gradually get back to your normal level of activity, but it will take time.

Heart attacks – Outpatient appointment

Most patients are seen again as an outpatient four to six weeks after leaving hospital. You may be given an appointment on discharge or it may be posted to you. If you have any medical problems before this appointment you should contact your GP. If you have any questions that are not urgent it is sensible to make a list of them so that you do not forget any during your appointment.

Usually no particular diet is indicated. During convalescence, rest for 15 to 30 minutes after each meal. It is advisable to avoid large meals as these may cause indigestion. Eat plenty of fruit and vegetables and cut down on salt. If you are overweight you may need to reduce the amount of calories you eat. If your cholesterol levels are high a dietician will see you. If you would like further advice on any of these points please ask to see a dietician.

It is important to get plenty of rest and relaxation during convalescence. You should try to get 7 to 8 hours sleep a night, or whatever is your normal amount, so as not to become overtired.

Prevention of heart attacks

You may be able to reduce risks by appropriate attitudes about the following:

- **cigarette smoking** – the most important avoidable cause of CHD, coronary heart disease. If you are a smoker, the most important decision you can make is to give it up. It's never too late. If you stop [smoking](#) you will greatly reduce your chances of having another heart attack. Various leaflets are available to help you give up. If you are not confident, ask for advice from the nursing staff, who will be happy to help you.
- **alcohol**, which, if consumed above the recommended amounts per week, adversely affects blood pressure, weight, and some blood fats. Alcohol drunk to excess will cause you to put on weight and your blood pressure to go up, and it may also cause liver damage. The recommended maximum weekly intake of [alcohol](#) is 21 units for a man and 14 for a woman.
- **exercise**, lack of which may cause weight increase and high blood pressure.
- **high blood pressure**, which if untreated may cause strokes, and heart disease
- **cholesterol** level in the blood from unhealthy diet – higher LDL cholesterol makes the risk of CHD higher
- **obesity**, which is associated with CHD risk, and contributes to other risks such as diabetes, high LDL, and high blood pressure
- **stress**, which may temporarily increase blood pressure.

Each year over 200 000 people in the UK have heart attacks. In the UK, heart and circulatory diseases are the biggest killers. About 110 000 to 120 000 people die from coronary heart disease per year in the UK. Coronary heart disease is the commonest cause of premature death in the UK. Many deaths are preventable.

Many heart attacks occur away from hospitals. Many occur within the first few minutes of the symptoms. Prompt access to the right treatment can mean the difference between living and dying. This means CPR, defibrillation and immediate transfer to hospital.

Each year about 20 000 people in the UK develop angina for the first time.

Most women imagine that heart disease affects men only. In fact, one in four women die through heart disease. Heart disease here means damage to the heart caused by narrowing of the coronary arteries. At first there may not be any noticeable symptoms. As it progresses it can lead to angina chest pain; and if an artery becomes blocked then part of the heart dies, leading to a heart attack.

Exercise plan after a heart attack – Do's and don'ts

When you are recovering in the first four to six weeks after a heart attack, you should not do anything that requires **lifting, pulling, pushing**, or a **sudden burst of energy**. If you are unsure about an activity, ask.

It is **OK** to do: light housework, dusting, cooking, washing dishes, making tea, light hand washing, shopping (but someone else should carry heavy loads), light gardening (weeding, planting out, trimming, watering with a hose).

It is **OK** to experience: slight breathlessness, feeling your muscles working, slight sweating, and/or tiredness that soon pass.

Avoid: heavy housework, vacuuming, scrubbing, sweeping, washing windows, driving a car, running upstairs or for a bus, lifting heavy items, painting and decorating, heavy gardening, mowing, digging, watering involving carrying a heavy can.

Stop immediately if you experience any of the following warning signs: pains in the chest, sickness or nausea, excessive sweating, excessive shortness of breath.

If these symptoms are not quickly relieved, do not hesitate to seek medical advice.

Walking is an ideal exercise for your rehabilitation. It is relaxing, non-strenuous exercise – free, easy, and safe.

To build up your stamina follow these five stages. Remain in each stage until you can complete it comfortably – at least three days. Move on to the next stage only when you feel ready.

Stage 1. Climb stairs and take a short walk 2 to 3 times a day

Stage 2. Take a continuous walk for ten minutes each day

Stage 3. Increase walking time to 20 minutes

Stage 4. Increase walking time to 45 minutes

Stage 5. Keeping the same distance, try to do it in less time while still feeling comfortable.

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