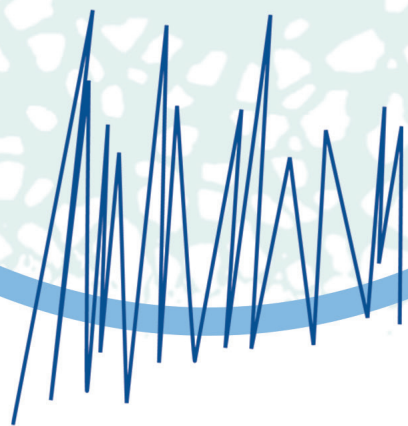


# Returning to fitness after coronary intervention

A patient's guide



The first few days and weeks following your discharge from Royal Papworth Hospital can be confusing and worrying for you and your family.

This leaflet will help you to understand what has happened to your heart. It gives you an idea of what to expect over the next few weeks and helps you to think about your recovery and how to get the best from life after your coronary stent / balloon procedure.

You may still have some questions and concerns after you have read this leaflet. Royal Papworth Hospital has an advice line, which you may telephone between 08:00 and 16:00 Monday to Friday. If we are unable to answer personally, leave your details on an answer machine and we will contact you as soon as we can. The advice line number is 01223 638468.

**Please remember that in an emergency you should ring 999.**

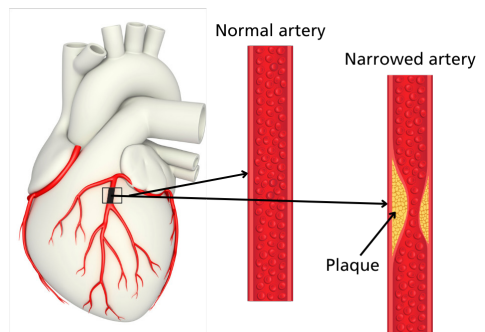
For advice at other times, please call the NHS 111 service. Don't forget to drop your discharge letter into your GP surgery straight away so that they are informed of your recent hospital admission. If you need to visit your GP or go to your local

hospital, please remember to take with you the complete discharge paperwork that you were given when you left Royal Papworth Hospital.

### **What is coronary artery disease?**

The heart is a muscular organ which pumps blood around the body. In order to do this work effectively it needs a good supply of blood and oxygen itself. The heart receives its blood supply through blood vessels called coronary arteries.

Over time (usually many years) the coronary arteries can become narrowed by deposits called plaques. The plaques contain fat and cholesterol. They occur within the wall of the artery. This process is called atherosclerosis.



## Risk factors for coronary artery disease

Risk factors are things that we know make it more likely that you will develop coronary artery disease. Some risk factors are related to your lifestyle, so you can work towards changing them. Others are not possible to change, but your chances of having another cardiac event can be reduced greatly by following a healthier lifestyle.

The cardiac rehabilitation staff will help you to recognise your own risk factors and to make sensible plans to change them.

### Risk factors you can change:

- Smoking
- Obesity, diet and nutrition
- High cholesterol level
- High blood pressure
- Lack of exercise
- Excess alcohol
- Prolonged stress

### Risk factors you can't change:

- Age
- Family history
- Gender
- Your ethnic origin
- Diabetes

## What is angina?

Angina is a term used to describe pain or heaviness in the chest, arm, shoulders or jaw. Sometimes the pain can occur elsewhere. Angina occurs if the heart muscle is not receiving enough oxygen because there is a narrowing in one or more of the arteries taking blood and oxygen to the heart muscle. If the artery relaxes and widens again, the blood will get through the narrowed artery and the pain is relieved.

Many people are given a glyceryl trinitrate (GTN) spray to use if they get angina, which acts quickly to relax and widen the artery. Angina pain is usually relieved by rest and GTN within a few minutes.

Angina does not cause permanent damage to your heart.

### Signs of angina:

- Heaviness or pressure around the chest. This may happen after increased activity
- Heavy, aching pain in the back, shoulders, arms or jaw
- Feeling unusually breathless after light activity such as walking a short distance
- Waking up at night feeling very short of breath
- Thumping or palpitations in the chest, especially if

it makes you feel dizzy or light-headed.

If you have any of these feelings, you should rest. If the pain continues after two to three minutes of rest, use your GTN.

#### **How to use your GTN spray:**

- Always sit down and try to rest and relax
- Spray the GTN as directed, under your tongue
- Rest for five minutes
- If the pain has not gone, repeat the GTN spray under your tongue
- Rest for five minutes

If you still have pain after two sprays (ie. 10 minutes), dial 999 for an ambulance.

If your pain is relieved completely by the GTN spray, you should rest for 10 minutes before you carry on.

You should make an appointment to see your GP if you have not had angina before. Or find that you are using your GTN spray more regularly.

Always keep your GTN with you in your pocket or bag. You can buy GTN spray or tablets over the counter at a pharmacy in an emergency. Always read the instructions and expiry dates.

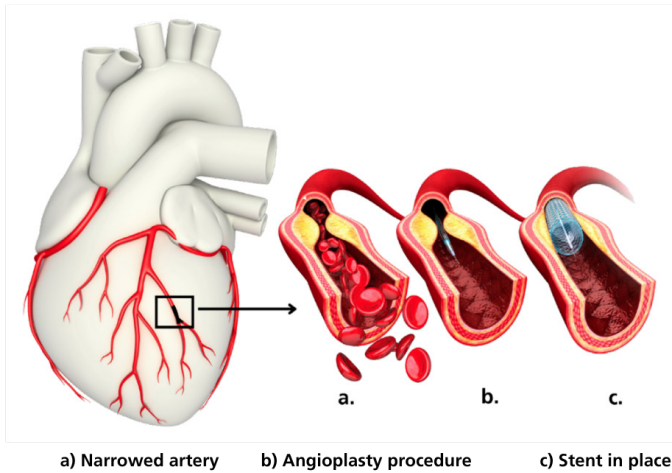
## **What is coronary angioplasty?**

The principle of an angioplasty procedure is to open a narrowing in a blood vessel so that it no longer restricts the blood flow. A catheter with a small inflatable balloon on the end is positioned within the narrowed section of the artery. The balloon is inflated which pushes the plaque against the artery wall to open up the artery and reduce restrictions. The procedure is carried out through your wrist or groin.

## **What is a stent?**

The artery may require support to remain open so a small, metal mesh tube is inserted into the artery using the balloon. The stent sits tightly against the wall of your artery. After a few weeks or months, your artery wall will grow to cover the metal mesh, so your artery will be held open permanently.

It is very important that you do your best to look after your stent, and your artery. You will be given some tablets (aspirin and clopidogrel / ticagrelor) to prevent blood clots from forming within the stent and elsewhere in your arteries. You should take these tablets as directed by your cardiologist.



### What happens if I continue to have angina?

It is common for people to experience discomfort in their chest in the first few days and weeks following an angioplasty. This is because your artery has suffered some bruising from the balloon and stent being fitted. You can have episodes of pain or discomfort as the stent settles into place.

This pain is usually quite different from that of angina. It is felt quite locally in the chest and is often described as sharp or stabbing. This type of pain may be relieved by paracetamol.

### Medication

You will be prescribed medication following your procedure. You may have been taking some of these medicines before.

Your cardiac rehabilitation team will discuss your medications and their benefits with you.

**Do not stop taking any medicines without discussing it with your doctor first.**

### Aspirin

This is called an anti-platelet drug. It helps to prevent platelets in your blood from sticking together and forming blood clots. It is very important to prevent clots forming around the new stent.

Aspirin is taken once daily, after some food, to help protect your stomach. Tell your GP if you get indigestion after taking aspirin. Another medicine may be prescribed to counteract this. You will need to take aspirin lifelong.

### **Clopidogrel / Ticagrelor**

These are also anti-platelet drugs and works together with aspirin to give the best possible cover. One of these will be prescribed for up to 12 months, depending on the type of stent used. It is very important that you continue taking this drug as prescribed to prevent clots forming around your stent.

### **Statin (e.g. atorvastatin)**

Statins will help to reduce your cholesterol together with a healthy low-fat diet. They also help to slow down the deposit of fatty areas (plaques) in your coronary arteries.

You must avoid eating grapefruit or drinking grapefruit juice as this can alter the level of statin. If you experience any new muscle aches or tenderness, please consult your GP. You will need to take this medicine lifelong.

### **Beta blockers (e.g. bisoprolol)**

This medicine will slow your heart rate, keeping it in a regular rhythm and at a safe level which will protect your heart. This will also help your heart to pump blood around your body more efficiently. Your blood pressure may also be reduced.

### **Angiotensin- converting enzyme (ACE) inhibitors (e.g. ramipril)**

This drug helps your arteries to relax. This action lowers your blood pressure and it is easier for your heart to pump blood around the body. The dose of this medicine will be increased gradually by your GP. Some people develop an irritating cough. If you do, then do not stop taking this medicine but consult your GP who will prescribe may prescribe an alternative.

### **Additional medications**

You may be on several other medications. For further information ask your pharmacist or GP. Please (please delete gap) read the patient information leaflets inside the medicine packaging for full details or any potential side effects.

If you are considering taking any supplementary or over the counter medicines then consult your pharmacist before doing so as they may interact with your medicines.

## Care of your wound

You will have a small plaster over the incision site; this should be removed 48 hours after your procedure. You may bath or shower the day after your procedure and avoid putting talcum powder on or around the wound site until the wound has healed.

It is normal to have bruising around the insertion site where the tubes were passed to carry out your stent procedure. This is because a lot of drugs were used to thin the blood during the procedure. The bruising should fade gradually over the next couple of weeks.

Two to three days following the procedure, for up to about a fortnight, you may notice a small pea or marble sized lump at the incision site, this is normal healing.

## If you experience any of the following you are advised to contact a doctor or attend A&E:

- If the lump at the incision site is any bigger than what is expected
- Excess swelling
- Heat or redness around the area
- Changes of sensation in your hand or fingers (if radial approach)
- Oozing from the wound site or any discharge through the dressing

## Radial (wrist) approach

It is common to have bruising to your wrist and arm; sometimes this can spread.

If your wrist bleeds, please do not panic, sit down and apply firm pressure until the bleeding stops. Contact a doctor or call 999 if it does not stop after 10-15 minutes.

## Femoral (groin) approach

It is common to have bruising to your groin and leg; sometimes this can spread to your abdomen. If your groin bleeds, please do not panic, lie down flat and get someone to apply firm pressure to your groin until the bleeding stops. Contact a doctor or call 999 if it does not stop after 10-15 minutes.

## Getting back to normal activity

### During the first week you should not do the following:

- Drive the car (this is a DVLA directive).
- Travel long distances - even as a passenger
- Ride your bike
- Heavy lifting or other heavy physical activity
- Vacuuming
- Any DIY
- Any sporting activity, including swimming, other than walking
- Return to work

### What you can do in the first week:

For the first two days you should get up as normal but do get as much rest as possible at home.

This is to allow your wound to heal, and to allow your coronary artery to begin to recover from the stent procedure.

- Gradually start to increase your activity after this.
- Walking is ideal. Start at a comfortable pace and only walk for a maximum of 20 minutes initially.
- Slowly increase the time you spend walking as much as you are able.
- Do not do heavy work at home.

- You may cook and prepare meals but avoid standing for longer than 20 minutes.

### What you can do in the second week:

- You can continue daily walking and gradually increase the distance and time as you feel able.
- Please speak to your cardiac rehabilitation team before resuming more strenuous activities or exercise.
- Gradually start to resume more household activities.

## Sex

Many people are anxious about resuming sexual activity. If you are worried, try to increase your confidence by being close and intimate with your partner.

Generally, if you can comfortably climb two flights of stairs, you can resume sex. Do not force yourself to 'perform' and make sure your room is warm and comfortable.

Try to relax and let your partner take a more active role at first. You should not use Viagra, or any similar tablet such as Cialis or Levitra, if you are also using GTN spray or any other form of nitrate tablets. You can discuss this with your cardiologist/GP.



### **Returning to work**

Most people return to their usual job after a week or two. It is a good idea to arrange to reduce your hours for the first week back at work, so that you do not become over tired and to avoid travelling in the rush hour.

If you have been doing heavy manual work, see whether you can return to lighter duties at first.

If you are self-employed, you can seek advice from the local Citizen's Advice Bureau.

### **Cardiac rehabilitation**

Whilst you were in hospital you will have received some information about cardiac rehabilitation. Your details will have been passed on to a specialist cardiac rehabilitation team who will contact you in the next few days.

Research studies have shown that people who attend cardiac rehabilitation are able to do more, feel more confident and lead a healthier lifestyle than those who do not attend. It is possible to improve how well your heart works and to reduce your risk of having another

cardiac event.

The rehabilitation staff will help you to continue with your recovery. They will help you to identify any relevant risk factors for heart disease, to enable you to adopt a healthy lifestyle and to get the most out of your procedure. You can follow a programme that is suitable for your own level of fitness.

You will be referred to your local cardiac rehabilitation programme and others prefer to return to Royal Papworth Hospital. On the last pages you will find the contact details for the cardiac rehabilitation teams. You will be given some information about the choices that are available to you.

### **What are my options for cardiac rehabilitation?**

**Group based exercise programme**  
This is a programme consisting of an initial assessment followed by weekly group sessions of exercise, in either a community centre or hospital gym, and includes relaxation and education.

Each week the team will deliver exercise classes and support on all aspects of your recovery. You will be given the most up to date information and will have the

opportunity to discuss your progress. You will be with a group of people who have also had a cardiac event. The programmes usually range from 6 to 12 weeks and provide exercise from low level/ seated to higher intensity. Sessions may also be available virtually for you to join.

### **Road to Recovery home-based programme**

The Road to Recovery programme is run from Royal Papworth Hospital for patients who live further away or have work commitments and have difficulty regularly attending a group-based programme.

You will only have to attend the hospital once for an initial assessment. Following your assessment, you will then go home with a DVD / online link for exercise and a selection of education material, plus a personal diary in which to record your progress.

You are supported by a weekly telephone call or email from the rehabilitation team to monitor and discuss your recovery and progress. The programme usually lasts 12 weeks.

### **How do I know which option is best for me?**

Evidence from clinical studies show that both the home-based and group-based exercise programmes deliver results in equal measure.

Each programme has advantages and benefits that will suit different people.

### **Useful contacts**

**Royal Papworth Hospital  
Advice Line**  
01223 638468

**British Heart Foundation Heart  
Information Line**  
08450 708070  
[www.bhf.org.uk](http://www.bhf.org.uk)

**The British Cardiac  
Patients Association**  
01949 837070  
[www.bcpa.co.uk](http://www.bcpa.co.uk)

**NHS Smoking Helpline**  
0800 123 1044  
[www.givingupsmoking.co.uk](http://www.givingupsmoking.co.uk)

**NHS 111 service**  
111  
[www.nhs.uk/111](http://www.nhs.uk/111)

**DVLA**  
[www.dvla.gov.uk](http://www.dvla.gov.uk)

## Cardiac rehabilitation contact details within your area

Addenbrooke's Hospital.....	01223 216985
Bedford Hospital.....	01234 792618
Doddington Community Hospital.....	01354 644367
Ipswich Hospital.....	01473 702073
James Paget Hospital.....	01493 452547
Lincolnshire Community Health Services.....	01522 308686
Luton and Dunstable.....	01582 497469
Norfolk and Norwich University Hospital.....	01603 287002
Norfolk Community.....	01362 655234
Royal Papworth Hospital.....	01223 638429
Peterborough City Hospital.....	01733 673785
Princess Alexandra Hospital.....	01279 827548
Suffolk Rehabilitation Services.....	0300 1232425
West Suffolk Hospital.....	01284 713611

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01223 638000

Large print copies and alternative language versions of this leaflet can be made available on request.

View a digital version of this leaflet by scanning the QR code.



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