

# Patient Information



## Undergoing Rotablation, Coronary Angioplasty and Stent

This information booklet was funded by the generous donations received by  
The Sussex Heart Charity

We would like to acknowledge and thank the Consultant Cardiologists (both past and present), Rehab Nurses at RSCH and around Sussex; for their valuable expertise and experience in compiling this information booklet which has been based on the original document produced by:  
Kay Hyde, Caroline Jones and Louise Bergen-Gander.  
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This booklet has been designed, published and funded by:

**The Sussex Heart Charity**

Registered Charity Number: 1120998

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## INTRODUCTION

This booklet is intended to give you a clearer understanding of what having an rotablation, angioplasty and/or stent will involve for both you and your family.

Please remember this is a general guide of what is likely to happen and there will be differences from person to person.

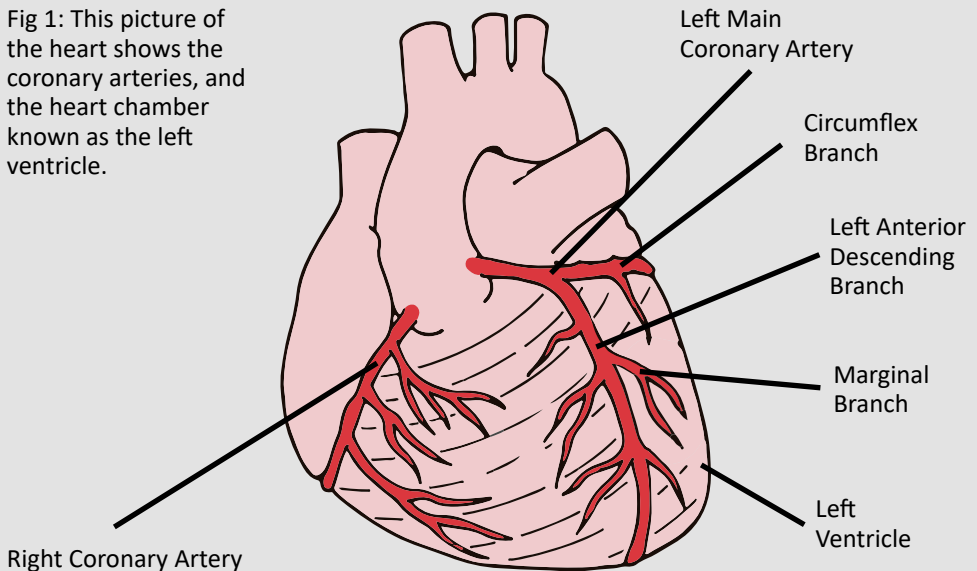
Any of the nurses and doctors who are looking after you will be happy to answer your questions and deal with any matters that may be worrying you.

## PLEASE DO NOT BE AFRAID TO ASK

## HEART DISEASE

The heart gets its blood supply from 3 main blood vessels called the coronary arteries. These arteries can become blocked or narrowed by the build up of a fatty substance within the wall of the coronary artery, reducing the amount of blood getting through to the heart muscle. This may have caused you to have chest pain or breathlessness and may even have resulted in a heart attack.

Fig 1: This picture of the heart shows the coronary arteries, and the heart chamber known as the left ventricle.



## ANGIOPLASTY

For some people one way of treating their particular heart problem is to widen or reopen the narrowed artery, which increases the heart's blood supply. This technique is known as coronary angioplasty and is very effective in relieving angina symptoms.

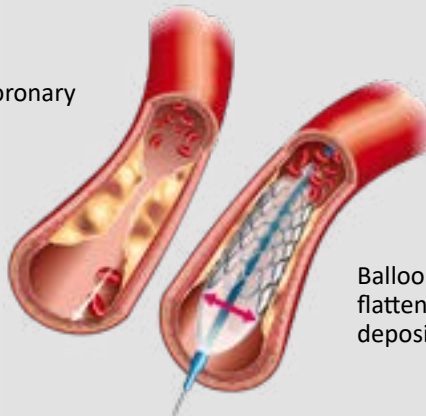
The angioplasty is usually carried out through the radial artery in your wrist. Occasionally an artery in the groin can be used called the femoral artery. At the start of the angioplasty you will be offered some medication to relax. A local anaesthetic will be given to numb the area that will be used to gain access to your arterial system. A small cut is made to insert a thin plastic tube called a sheath. The doctor uses X-ray screening to help direct the catheter to a coronary artery and a dye is injected through the tube to locate the narrowed/blocked vessels. When the dye is injected you may notice a warm, flushing sensation and you may even feel as though you want to pass urine, this is a normal feeling that will soon pass.

Once in position the catheter (which has a small deflated balloon at the tip) is then inflated and deflated repeatedly flattening the fatty deposits that are blocking the artery (see Fig 2). This makes the vessel wider and improves the heart muscle's blood supply. When the narrowing is reduced the deflated balloon catheter is removed. It is common to experience some chest discomfort when the balloon is being inflated as it temporarily blocks the blood flow through the artery. This feeling should go away when the balloon is deflated. During the angioplasty you will be asked how you are feeling and it is very important to tell the doctor or nurse if you experience any pain or discomfort.

After the angiogram your doctor may use a drug-eluting balloon. This balloon is coated with a special medication to prevent the re-growth of tissue within the artery. This reduces the risk of the artery narrowing in the future. Similar to the angioplasty, a wire with a balloon coated in the medication is advanced through the catheter to the area being treated. The balloon is inflated and the medication on the balloon surface is delivered to the artery wall and surrounding tissue. Once completed the balloon is deflated and removed.

Fig 2

Plaque in coronary artery



Balloon catheter flattens the fatty deposits

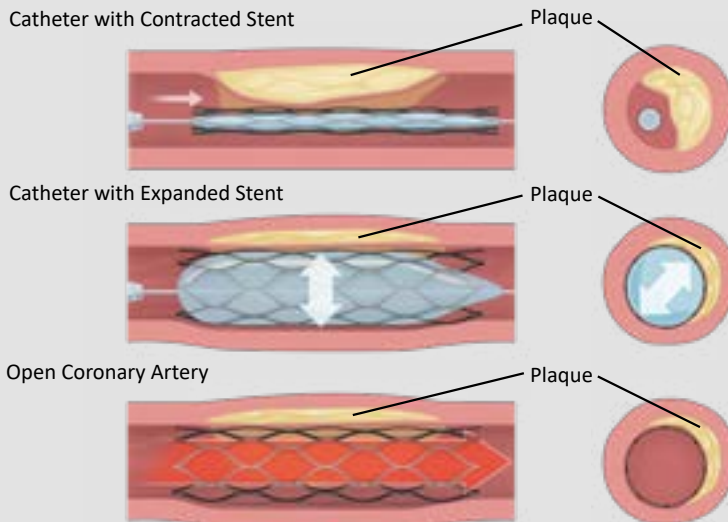
## ROTABLATION

Sometimes the plaque within the artery is hardened or so narrow the balloon can not pass through it. This is when a fine wire is guided through the narrowing.

Then a special catheter (a thin tube) is inserted along the wire, a tiny drill is at its tip which is powered by compressed air. The drill will chip away at the plaque to gradually widen the narrowing. Then a balloon (angioplasty) can be inserted to widen the artery more to increase the blood flow to heart muscle.

## CORONARY STENTS

A stent is a cylinder-shaped, stainless steel, mesh device that is placed in the coronary artery at the blocked area. Before the stent is inserted, a channel is created at the blockage, using the balloon angioplasty procedure. Another balloon with the stent attached to it is then inserted into the blocked area. As the balloon is inflated, the metal mesh on the stent expands. This expanded stent pushes the fatty deposits (plaque) out of the way, so that oxygen-rich blood can flow through. The balloon is deflated and removed then, and the stent is left in the coronary artery. The metal stent is very small and will not interfere with your life. For example, it will not set off alarms in airports or shops, nor will it rust!



Drug eluting stents are a type of cardiac stent which is coated with a special medication. Once expanded in the artery it slowly releases a drug to block tissue growth around the stent. They prevent fibrosis (scar tissue forming) that together with clots could otherwise block the stented artery. This is why you will require a period of dual antiplatelet medication.

## ARE THERE ANY RISKS?

As with any heart procedure there are risks attached and they vary from person to person. Your doctor will explain these to you when you sign the consent form. There is a very small risk (approximately 1%) of the narrowed artery becoming blocked during the procedure and it may be necessary to have urgent heart surgery.

## AFTER THE PROCEDURE

The procedure lasts approximately 1 hour. When finished you will be taken back to the ward, placed on the cardiac monitor and your blood pressure and pulse checked frequently.

If you had the procedure done through the artery in the wrist the sheath will be removed at the end of the procedure and a wristband applied for compression. The wristband will be inflated for a maximum of 2.5hrs then slowly deflated by the nurse. You will be able to sit up when you return to the ward. Please inform the nurse if you notice any swelling or bleeding.

If your procedure is done via the groin, a seal device called an angioseal is deployed at the end of your procedure; this is also when the sheath is removed. You will need to lie down flat for approximately 30-60 minutes. Sometimes the sheath may need to be removed on the ward, this means you may be required to lie flat for longer. When the sheath is ready to be removed the nurse will apply firm pressure over your groin site for 15 minutes. The nurse will frequently check the groin site as well as your blood pressure and heart rate.

Post all cardiac interventions you will be able to eat and drink when you have settled back on the ward. It is encouraged to drink plenty of fluids to flush the kidneys after the procedure.

## GOING HOME

Provided that there have been no problems most patients will be able to go home the day of the procedure. You will be expected to make your own transport arrangements for going home, however if you are having difficulties doing so please discuss with the ward staff as soon as possible. It is advisable to make arrangements to be accompanied to your transport home as Ward Staff are not available to accompany you.

## TABLETS

On discharge from hospital you will be given a four week supply of any new medicines by the nursing staff. This needs to be continued for the specified duration which the cardiologist has recommended post your procedure. Please contact your gp for a repeat prescription and ensure any new medication is added.

Following angioplasty and stent implantation you will be prescribed aspirin and clopidogrel (or ticagrelor or prasugrel) in combination to reduce the risk of blood clots forming inside the newly inserted stent until the body covers the stents with normal smooth lining cells. Aspirin is continued indefinitely. The duration of the second medicine will depend on the type of stent used and you will be told how long to take this medicine for - if you are unsure please ask.

## CHEST PAIN

Following this procedure some people may experience pain or discomfort in their chest. This is not unusual because during the procedure bruising can occur. Over a period of time this will lessen and disappear altogether.

If you do get chest pain and think it is angina:

1. Stop what you are doing and sit down and try and rest.
2. Take your GTN spray or GTN tablets, according to your doctor or nurse's instructions.

The pain should ease in a few minutes - if it doesn't take a second dose.

3. **If the pain does not ease within a few minutes after your second dose, call 999 immediately.**

## WOUND CARE

In the highly unlikely event of your wound starting to bleed lie down flat and get a family member or friend to apply pressure to your groin/wrist. If the bleeding does not stop within ten minutes, call an ambulance immediately.

It is normal for your groin/wrist to feel tender for a few days after the procedure. A bruise may develop and extend down as far as your knee. If a hard tender lump develops under the skin around the area of the incision ring the Cardiac Care Unit on 01273 664484 for advice. We also advise you to avoid hot baths for 48 hours as this may encourage bleeding.

**IF YOU HAVE HAD A HEART ATTACK IN THE  
LAST 6 WEEKS**

**FOLLOW THE ADVICE GIVEN TO YOU  
BY YOUR  
CARDIAC - REHABILITATION NURSE**

**The following applies to people who have not  
had a heart attack.**

## **ACTIVITY**

Please remember the following information should be used as guidelines only, everyone is different.

There aren't many things you should avoid doing, however for the first few days you are advised not to do any strenuous exercise, such as lifting heavy objects (e.g. shopping) excessive pulling and pushing (e.g. cutting the grass, digging the garden, shoveling and vacuum cleaning).

Give yourself a week or two to get your strength back before returning to your everyday activities. A good starting point is to take regular walks that you increase on a daily basis. You do not have to avoid climbing stairs or walking up hills just take them slowly and steadily at first. After this period you should be back doing the things you used to do and you may even find that you can do more if angina or breathlessness was holding you back before.



## DRIVING

You are not legally allowed to drive for 1 week after this procedure. If you have an LGV or PCV license you will be required to undergo an exercise test before getting your license back. This will need to be discussed with your employer, GP and Consultant. The same will apply for train drivers and pilots.

## FLYING

It is safe to fly to any destination 10 days after your treatment provided you have not had any complications, and you are the passenger not the pilot!

## MRI SCANS

Following stent insertion, patients are unable to have an MRI Scan for six weeks.

## RETURNING TO WORK

This will depend on many factors such as the overall state of your health and the type of work you do. If you have been working up until the time of your angioplasty you should be able to return in a week or so, you may like to discuss this in more detail with your doctor.

## SEX

You and your partner may be worried that sex will put the heart under a great deal of strain and cause some damage. These fears are understandable but you will be pleased to hear that they are not true. Sexual activity can be resumed when you and your partner feel ready. Generally once you are managing everyday activities you can safely resume your sex life. Research has shown that the physical effort during sexual intercourse from start to finish is no more than climbing 20 stairs.

## RISK FACTORS

To maintain the health of your heart, it is important to monitor your cardiac risk factors. Risk factors are things such as smoking, high cholesterol, being overweight, which can lead to coronary heart disease. We know we can avoid further problems with your heart by helping you reduce your cardiac risk factors.

Listed below are the main risk factors. You can tick those that apply to you after discussion with your doctor or nurse.

Risk Factors		
Smoking	Not coping with stress	High cholesterol level
Family history of heart conditions	Diabetes	Overweight
High blood pressure	Lack of exercise	Too much alcohol

Many of these risk factors can be cut out or at least reduced. If you want more information regarding the above contact your cardiac rehabilitation nurse or GP surgery.

We hope you find this leaflet helpful, if you have any comments please let us know.

Finally all the staff involved with your care wish you a very speedy recovery.

With special thanks to the **“Patient and Public Involvement Group Members”** for their valuable contribution and comments.

## CARDIAC REHABILITATION

In Brighton you are invited to attend a rehabilitation programme approximately two weeks after discharge. It is held twice weekly for 6 weeks. The programme includes graduated exercise and general health discussions lasting for two hours. Your level of fitness is taken into consideration.

If you live outside of the Brighton area you will be referred to the Cardiac Rehabilitation Nurse at your local hospital. They may then contact you regarding their service.

People who have been on the rehabilitation programme say that the main benefits are that they feel more confident about coping with everyday life. They also find that the exercise programme helps them to increase their level of fitness and to recognise any limitations they may have and how best to deal with this. They also enjoy the chance to meet with others who have had a similar experience.

## COMMUNITY PHASE 4 CARDIAC REHABILITATION CLASSES

Upon successful completion of Phase 3, patients are referred to Phase 4 programmes. These are community-based exercise programmes providing long term maintenance of changed behaviour.

Phase 4 (Long-term Maintenance of Changed Behaviour) is vital if patients are to gain long term benefits, since habitual exercise over months and years is likely to limit the progression of any underlying coronary disease.

Phase 4 classes are available for cardiac patients who have attended the Cardiac Rehabilitation sessions provided by your local hospital. They are run by instructors who are qualified in exercising heart patients.

### People who can use the service:

Brighton and Hove City Primary Care Trust patients admitted to the Royal Sussex County Hospital or the Princess Royal Hospital in Haywards Heath, following Myocardial Infarction (Heart Attack), Coronary Artery Bypass Surgery, Valve Surgery, Internal Cardioverter Defibrillator and Angioplasty & Stent insertion. We also see patients from the District General Hospitals along the south coast at RSCH. The service is available to all patients over 18yrs.

**Please discuss your suitability to attend phase 4 classes with your Consultant, GP or Cardiac Rehabilitation Nurse.**

## USEFUL PHONE NUMBERS & WEB LINKS

<b>Albion Ward</b>	<b>01273 523175</b>
<b>Lewes Ward</b>	<b>01273 523176</b>
<b>Cardiac Care Unit Level 6A</b>	<b>01273 664484 or 01273 523177</b>
<b>The Sussex Heart Charity</b>	<b>01273 523026 www.sussexheartcharity.org</b>
<b>NHS Direct - health advice</b>	<b>0845 46 47</b>
<b>NHS Smoking Helpline</b>	<b>0300 1231044</b>
<b>Alcoholics Anonymous</b>	<b>0800 9177650</b>
<b>Somerville Foundation</b>	<b>01473 252007</b>
<b>The British Heart Foundation</b>	<b>0300 3303311 hearhelpline@bhf.org.uk</b>
<b>Cardiomyopathy UK Helpline</b>	<b>0800 018 1024</b>
<b>Peer Support Volunteers Live Chat</b>	<b>01494 791224 www.cardiomyopathy.org</b>
<b>ICU Steps</b>	<b>www.icusteps.org</b>
<b>Heart Valve Voice</b>	<b>www.heartvalvevoice.com</b>
<b>Society for Cardiothoracic Surgery</b>	<b>www.scts.org</b>

## USEFUL FACEBOOK GROUPS

You can use Facebook to search and join groups for additional information and support. The groups listed as 'Private Groups' are accessible once you have requested to join and been approved by the group moderator.

<b>Pulmonary Hypertension Association</b>	<b>@PulmonaryHypertensionAssociation</b>
<b>Pumping Marvellous</b>	<b>Private Group</b>
<b>Sudden Cardiac Arrest UK</b>	<b>@SuddenCardiacArrestUK</b>
<b>SCAD Alliance</b>	<b>@SCADAlliance</b>
<b>Aortic Dissection Support Group</b>	<b>@AorticDissect</b>
<b>Mitral Valve Repair</b>	<b>@MitralValveRepairResources</b>
<b>Endocarditis Support Group</b>	<b>Private Group</b>
<b>Open heart surgery (CABG)</b>	<b>Private Group</b>

## CARDIAC REHABILITATION CONTACTS

Please telephone your local Cardiac Rehabilitation number if you have any queries after your operation.

<b>The Royal Sussex County Hospital</b>	<b>01273 696 955</b> <b>Ext: 64009</b>
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<b>The Princess Royal Hospital, Haywards Heath Haywards Heath</b>	<b>01444 441 881</b> <b>Ext: 68280</b>
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<b>Worthing &amp; Southlands Hospital</b>	<b>01273 446 019</b>
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<b>St Richard's Hospital, Chichester</b>	<b>01243 831 829</b>
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<b>East Surrey Hospital, Redhill &amp; Crawley Hospital</b>	<b>01737 768 511</b> <b>Ext: 66973</b>
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<b>Eastbourne Hospital</b>	<b>0300 131 4450</b>
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<b>The Conquest Hospital, Hastings</b>	<b>0300 131 5303</b>
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## Cardiac Patient Involvement Group

We are a group of patients who have had experience of the Sussex Cardiac Centre – either as an in-patient or an out-patient, either cardiology or cardiac surgery.

**New members will be very welcome and membership is free.**

We meet every 3 months in a relaxed and informal environment (alternate Mondays and Wednesdays 5:00- 6:30 pm) to:

- **Provide an opportunity for staff working in the Sussex Cardiac Centre to hear patient's views, for example reviewing patient information and advice on feedback questionnaires and focus groups**
- **Provide an opportunity where patients can raise issues that are important to them, for example information to patients on waiting lists, privacy and dignity issues**

What you have to say is important to us and as a result of our discussions we can make changes to benefit other patients.

**If you are interested and would like further information please contact:**

**Sarah Young**  
Nurse Consultant Cardiology

**Tel:**  
01273 696955 ext. 67850

**Email:**  
[Sarah.young10@nhs.net](mailto:Sarah.young10@nhs.net)





# YOUR LOCAL, INDEPENDENT HEART CARE CHARITY

This booklet was designed and published by:

## The Sussex Heart Charity

Since 1987 we have supported all levels of care for cardiac patients in Sussex. From producing patient information, introducing new standards of care, purchasing innovative medical equipment and a long list of community-based projects.

The Sussex Heart Charity has worked tirelessly to raise funds to help ensure that your journey as a cardiac patient is as efficient and effective as possible. Thus offering you the best and most advanced care available.

We are passionate about medical advances and the continuous Training & Development of nurses and other medical staff. Many of the staff who you have been in contact with recently will have benefited from the services we provide in one form or another.

Not only that, you will have experienced medical equipment purchased by us during your hospital stay and your cardiac rehabilitation.

As our name suggests, we are a charity and are funded entirely by donations from generous supporters who believe in our mission to Improve, Support and Fund.

There's so much work to do and we'd like to ask if you too would kindly help us with our mission...

Your donation will help us help more people like you. More than one in four deaths in the UK are caused by Heart Disease, that's nearly 170,000 people every year. We'd like to change that!

We have included a form at the rear of this booklet which can be removed and completed.

**Thank you!**







# YOUR LOCAL, INDEPENDENT HEART CARE CHARITY

## Our mission is to:



### IMPROVE...

the care, treatment and rehabilitation of persons suffering from cardiac conditions.



### SUPPORT...

the hospitals of Sussex by funding equipment, staff development and training.



### FUND...

community projects, research, awareness and lifesaving equipment.

[www.sussexheartcharity.org](http://www.sussexheartcharity.org)

tel: 01273 523 026

email: [info@sussexheartcharity.org](mailto:info@sussexheartcharity.org)

The Sussex Heart Charity  
Southpoint, 8 Paston Place  
Brighton  
East Sussex  
BN2 1HA

## MAP OF RSCH SHOWING CARDIAC CENTRE



### Getting to the Royal Sussex County Hospital by Bus

Bus services 1, 7, 7A, 14C, 23, 40X, 42, 47, 52 and 57 all stop at the hospital.

Timetable details are available from: Brighton & Hove Bus Company on:

**01273 886200** or online at [www.buses.co.uk](http://www.buses.co.uk)

### By Train

Brighton has a mainline railway station

For timetable details please call:

**03457 484950** or online at [www.nationalrail.co.uk](http://www.nationalrail.co.uk)

## YOUR DETAILS

PLEASE COMPLETE THIS FORM IN BLOCK CAPITALS

TITLE:

FIRST NAME:

SURNAME:

EMAIL: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TOWN:

POSTCODE:

TELEPHONE:

MOBILE:

## SET UP A STANDING ORDER YOURSELF

The following details can be used to set up a standing order via your own online banking.  
Please let us know so we can tell you how we use your generous donations.

ACCOUNT The Sussex Heart Charity

SORT CODE    -    -

ACCOUNT NUMBER

## OR YOU CAN PROVIDE US WITH INSTRUCTIONS TO CONTACT YOUR BANK AND SET UP A STANDING ORDER FOR YOU

I / WE WOULD LIKE TO DONATE: £  PER MONTH £  PER QUARTER £  PER YEAR

BANK NAME \_\_\_\_\_

BANK ADDRESS \_\_\_\_\_

ACCOUNT NAME(S) \_\_\_\_\_

SORT CODE   -   -

ACCOUNT NUMBER

STARTING   /   /



## SINGLE ONE-OFF DONATION

Please don't send cash in the post  
Payable to: The Sussex Heart Charity

I HAVE INCLUDED A DONATION OF £ \_\_\_\_\_

## GIFT AID

Yes I would like you to claim Gift Aid on my donation  
I want all donations I've made to you in the past four years and all donations in future to be treated as Gift Aid donations until I notify you otherwise.  
I am a UK taxpayer and understand that if I pay less Income Tax and/or Capital Gains Tax than the amount of Gift Aid claimed on all my donations in that tax year it is my responsibility to pay any difference.  
We will claim 25p on every £1 you donate.

SIGNATURE \_\_\_\_\_

DATE   /   /

## PLEASE CONTACT ME ABOUT YOUR WORK AND EVENTS

In line with General Data Protection Regulation (GDPR) we are NOT allowed to contact you unless you give us permission.  
Please choose your preferred method of contact.

PHONE  TEXT  EMAIL  POST

PLEASE RETURN YOUR COMPLETED FORM TO:

**FREEPOST: THE SUSSEX HEART CHARITY** (No need to write anything else on the envelope but please use capitals)



Your local, independent  
heart care charity

[www.sussexheartcharity.org](http://www.sussexheartcharity.org)  
[info@sussexheartcharity.org](mailto:info@sussexheartcharity.org)

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