

Fig. 5

Cocaine & the Heart

A guide for people who have experienced a heart problem

Superior
Vena Cava

Right
Atrium

Pulmonic
Valve

Tricuspid
Valve



Cocaine & the Heart

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Introduction

Taking drugs can cause health problems – however, **cocaine** in particular, can cause problems for your **heart**.

Whether your recent heart problems have been related to using cocaine or not – this booklet aims to inform you of the risks to your heart from using cocaine.

The Cardiac Rehabilitation Team will support you in your recovery following your heart problem – we are also able to offer help in stopping cocaine use.

We want you to tell us of any recent use of drugs.

This is particularly important if you have used cocaine, as it can affect what medications we are able to safely give you.

Knowing about your drug use will allow us to care for you appropriately.

Our service is non-judgmental and confidential.

We will not inform any other authority if you tell us about your use of drugs.

If we know about your drug use we will be able to give you the best support and advice.

Your Heart

Your heart is a muscle that needs its very own supply of blood.

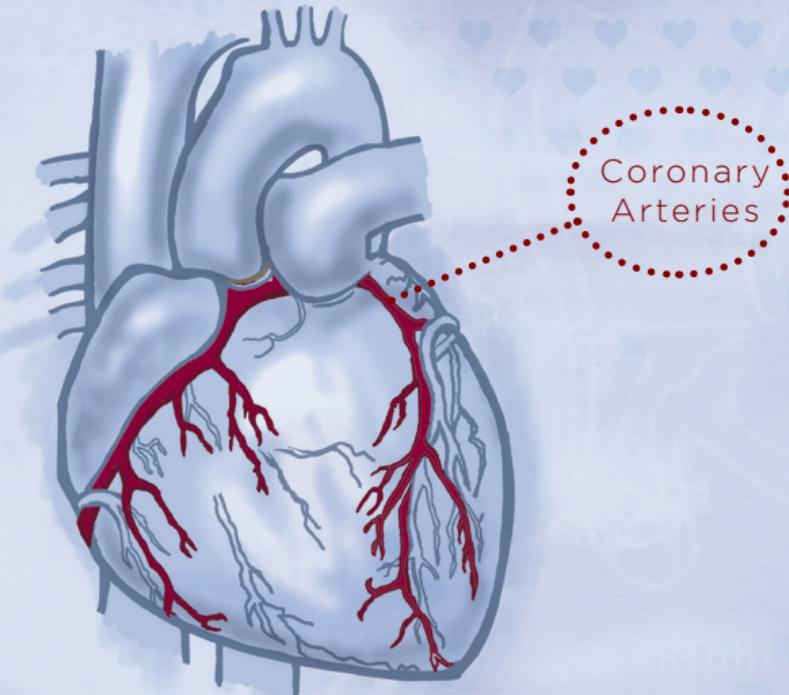
For your organs and muscles to work, they need to be fed with blood that is **full of oxygen**.

The job of your heart is to pump this oxygen rich blood around your body and carry away waste products such as carbon dioxide.

Your heart is a muscle and so needs its very own supply of oxygen rich blood. It gets this supply from arteries that cover the surface of your heart.

These are called **coronary arteries**.

There are three main coronary arteries and lots of smaller ones.



Heart problems

Coronary Heart

Disease – is caused by the gradual build up of fatty deposits in the coronary arteries.

Over many years the build up of these fatty deposits (called atheroma) can lead to **angina** and a **heart attack**.

A heart attack can happen when a coronary artery becomes blocked.

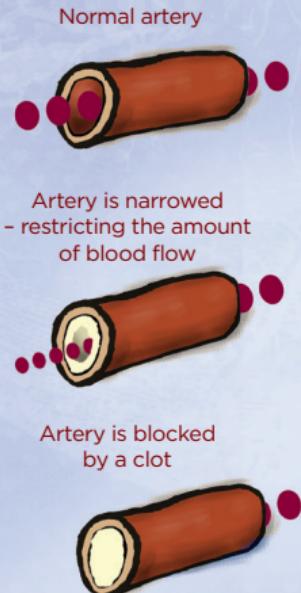
Angina – can occur when the coronary arteries become narrowed – this restricts the amount of blood and oxygen that the heart muscle can receive.

Common symptoms of angina include chest discomfort and shortness of breath. This commonly occurs on exertion and can be relieved by resting.

A Heart Attack –

can happen when a narrowed coronary artery becomes blocked. This is usually due to a clot (called a thrombus) forming in the artery.

Signs of a heart attack include chest pain that is not relieved by resting; shortness of breath; nausea and sweating.



Cocaine and the heart

Cocaine is a **stimulant drug** that works by altering the balance of chemicals in your brain and other parts of your body.

This makes you feel wide awake and alert, as well as making your **heart beat faster** and causing your blood pressure to increase.

Just as a car engine needs more petrol the faster you drive – your heart needs more blood and oxygen if it is beating faster.

However, cocaine also affects chemicals that cause your coronary arteries to tighten and narrow.



Cocaine releases chemicals that tighten and narrow the arteries

This means that at a time when your heart needs more blood and oxygen than normal, it is in fact getting less – as not as much oxygen rich blood can get through the tightened coronary arteries.

This lack of oxygen rich blood to your heart can result in you feeling chest pains.

Lack of oxygen could lead to damage to the heart muscle resulting in a heart attack, a tear in the wall of one of your largest arteries (the aorta); irregular heartbeat or even sudden death.

Alcohol & Cigarettes



If you smoke cigarettes and use alcohol as well as cocaine, your risk of heart problems increases even further.

Cocaine makes you thirsty and keeps you awake, which means you tend to drink more **alcohol** when using cocaine.

When you take cocaine and drink alcohol your liver converts it into a new substance called **cocaethylene**.

This new substance is more damaging to your liver and heart than either cocaine or alcohol on their own.

Nicotine is a stimulant drug and makes the heart beat faster, it also makes your blood 'stickier' and deprives the heart of oxygen.

Beta Blockers

Beta blockers are drugs that slow down the heart rate and lower blood pressure so are often used to treat heart problems.

However, if you've used cocaine and are then given beta blockers, it can cause your coronary arteries to narrow further and your blood pressure to rise.

Beta blockers should be avoided while cocaine is still in your blood stream.

There are other drugs that can be used to treat your heart, but medical staff can only do this if they know you have used cocaine.

Chest Pain

If you do experience chest pain following recent cocaine use:

Rest for 15 minutes

If the chest pain hasn't gone -
CALL 999 ask for an ambulance.



GTN Spray



GTN or Glyceryl Trinitrate is something which may be prescribed for you if you have experienced angina or a heart attack.

GTN works by dilating the coronary arteries to relieve chest pain.

If you have angina or a heart attack you will be given GTN spray or tablets.

If you get chest discomfort:

- Sit down and rest
- Take 1 to 2 sprays under your tongue and wait 5 minutes.
- If pain not relieved – Take a further 1 to 2 sprays under your tongue and wait a further 5 minutes
- If pain not relieved – Take a further 1 to 2 sprays under your tongue and wait a further 5 minutes
- If pain still not relieved **CALL 999.**

Recovery

There is a risk to your heart whether you are an occasional or a regular cocaine user.

The only way to avoid the risk to your heart is by not taking cocaine.

If you have experienced a heart problem after using cocaine, you will need to stop using.

If cocaine has caused problems for your heart once – it can do so again.

The Cardiac Rehabilitation Team will support you in your recovery and rehabilitation, both while you are in hospital, and after you go home.

We can help you regain your physical health, and offer psychological support that can help with stress and the emotions that can result from having problems with your heart.

If you want specialist support around drugs or alcohol we can refer you to a drug service or you can contact them yourself by ringing one of the numbers on the back page.

Ask a member of the Cardiac Rehabilitation Team if you want to know more about any aspect of cardiac rehabilitation.



For further advice and support:

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[>] aims

To provide information that highlights specific risks associated with cocaine and the heart and to encourage dialogue around patients use of drugs.

[>] audience

Injecting drug users. Use with under 16s with support.

[▼] content

No swearing. Illustrations of drug use.

[£] funding

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