



British Heart  
Foundation

# Cardiac syndrome X

## What is Cardiac syndrome X?

Cardiac syndrome X is a condition which causes the symptoms of angina – such as chest pain or tightness – and often comes on with exercise. It is often unpredictable and at times severe.

Tests will usually show that your coronary arteries (the arteries which supply the heart muscle with blood) are normal, which means it is not caused by coronary heart disease.

Around three quarters of those with cardiac syndrome X are women. Most are between the ages of 45 and 55 and usually approaching, or have been through, the menopause. Younger women who are diagnosed with cardiac syndrome X have always nearly had a hysterectomy.

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## What causes it?

More research is needed to find out more about the causes of cardiac syndrome X, but it has been linked to:

- low levels of the female hormone oestrogen which plays an important part in protecting blood vessels
- a condition called **microvascular angina** (or **small vessel disease**) where the small blood vessels which supply your heart muscle with blood tighten or constrict
- a problem with how your body responds to pain.

## What are the symptoms?

The symptoms are very similar to those of angina, and you may feel like you are having a heart attack. You may feel a heaviness or tightness in your chest, which can spread to your arms, neck, jaw, back or stomach. You may also feel short of breath, sick, sweaty and light headed.

**If you have not been told you have cardiac syndrome X or angina and you get chest pain, or any of the symptoms above, call 999 immediately.**

## Heart Helpline

**Our cardiac nurses and heart health advisors are here to answer your questions about anything heart related.**

**Call us on 0300 330 3311**

**Similar cost to 01 or 02 numbers.  
Lines are open 9am - 5pm Monday to Friday.**

**This information does not replace the advice that your doctor or nurse may give you. If you are worried about your heart health in any way, contact your GP or local healthcare provider.**

## What tests will I need?

Cardiac syndrome X is diagnosed using many of the same tests used to check for coronary heart disease. You may need to have an electrocardiogram (ECG), an exercise test, a radionuclide test and a coronary angiogram.

If you have cardiac syndrome X your coronary angiogram is likely to be normal, even if some of your other test results are abnormal. Your doctor may also send you for tests to rule out any other conditions which may be causing your symptoms, such as high blood pressure, heart valve disease, stomach problems or muscular pain.

## Will it cause me to have a heart attack?

Cardiac syndrome X does not increase your risk of developing coronary heart disease, but its symptoms can feel like those of a heart attack.

## Will I need treatment?

You will likely be given medicines to control your symptoms, such as those used to treat angina. You will also be encouraged to make healthier lifestyle choices – for example quitting smoking and taking regular exercise.

Hormone replacement therapy (HRT) may help to relieve symptoms for some women, but it is not a cure. Also, there is some evidence to suggest that taking HRT can increase your risk of developing coronary heart disease in the future.