



British Heart  
Foundation

# Wolff-Parkinson-White syndrome (WPW)

## What is WPW syndrome?

WPW syndrome is a condition which makes the heart suddenly beat abnormally fast, in an abnormal heart rhythm called supraventricular tachycardia (SVT).

The normal heart rate is usually between 60 and 100 beats per minute. For someone with WPW syndrome who develops SVT, this can quickly increase to as high as 230 beats per minute.

## What causes it?

Electrical impulses spread through the heart's cells, causing the heart muscle to contract. In WPW, there is an extra electrical pathway (called an 'accessory pathway') in the heart which allows the electrical impulses to bypass their usual route. This is a bit like a short circuit, triggering an episode of SVT.

An accessory pathway is present from birth and WPW is most common in babies born with other types of heart defects (congenital heart disease). However, it is also seen in people who have structurally normal hearts. WPW syndrome can be inherited, although this is extremely rare. It is only found to run in families in less than 1% of cases.

## What are the symptoms?

Many people with WPW syndrome do not get any symptoms, and the condition often goes undetected till much later in life. Symptoms can include:

- palpitations
- feeling light-headed or dizzy
- blackouts
- shortness of breath
- sweating
- chest pain or discomfort.

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FOR EVERY  
HEARTBEAT**

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## Heart Helpline

**Our cardiac nurses and information support officers are here to answer your questions and give you all the heart health information and support you need.**

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**Call us on 0300 330 3311**

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**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?

An ECG (electrocardiogram) is used to record your hearts rhythm. If you have WPW syndrome your ECG would usually show a 'delta wave', an unusual pattern that is not usually seen in people who don't have the condition. An ECG can also help diagnose an SVT, although if it comes and goes it can be difficult to detect using a normal ECG. You may need to have a 24-hour ECG (sometimes called a holter monitor). You may also be given a type of event recorder - a device which records the hearts activity over a longer period of time or when symptoms occur.

## Will I need treatment?

The normal treatment for WPW syndrome is a catheter ablation. Thin, flexible tubes called catheters are fed into your heart through a vein or artery in your wrist or groin. Once in the correct position, the catheter is used to deliver radiofrequency energy to destroy the extra electrical pathway in your heart.

Some people may also need to take medicines.