

# Heart Arrhythmias

## Wolff-Parkinson-White Syndrome

## Wolff-Parkinson-White syndrome (WPW)

In this syndrome, an abnormal electrical pathway connects the top chambers of the heart to the bottom chambers of the heart. This means that electrical signals bypass a piece of tissue called the atrioventricular (AV) node, which slows electrical signals in the healthy heart. Since the AV node is bypassed in WPW, electrical signals can arrive at the lower chambers of the heart too quickly, which causes problems with the heart's rhythm. This condition is thought to be caused by a small piece of the heart muscle that develops in the wrong place before birth.

### Symptoms include:



- Episodes where the heart beats a lot faster than normal



- Rapid, fluttering or pounding heartbeat



- Pain or tightness in the chest



- Shortness of breath or difficulty breathing



- Dizziness or fainting

*Generally the episodes of fast heartbeat in WPW do not last long, and the person can recover quickly. Many people with WPW do not experience serious problems. But complications of untreated WPW can include:*



- Low blood pressure



- Fainting



- Rarely, cardiac arrest or death


There are several potential treatments. For people who do not have symptoms, anti-arrhythmic medicines may be used. These help to maintain or restore a normal heart rhythm, and have the benefit of avoiding the risks of surgery. In other cases, an invasive procedure (where an incision is made in the body and instruments are inserted) may be used to determine where the extra electrical pathway is located. An ablation can then be used to modify the abnormal pathway that causes the arrhythmia. In this procedure, a thin tube called a catheter is used to guide heating or cooling energy to the site of the extra pathway. This energy is used to modify the pathway. The procedure helps to prevent the heart going out of rhythm, and has a high success rate.

Risks of ablation can include: infection after surgery, damage to blood vessels or heart valves, a new or worsening arrhythmia (in some rare cases needing a pacemaker), blood clots, stroke or heart attack. Your doctor will discuss the risks and benefits of this treatment with you. Although the procedure has risks, it is usually highly successful, and patients are able to return to their normal activities with a good quality of life.





**Hearts4heart supports, educates and advocates for Australians living with atrial fibrillation and other heart conditions. Join our community and the conversation.**

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