

Wolf-Parkinson-White Syndrome;

http://www.ecureme.com/emyhealth/data/Wolf-Parkinson-White_Syndrome.asp

Description;

[Wolf-Parkinson-White Syndrome](#) (WPW) is a disease involving the electrical fibers in the heart. Normally, an electrical signal starts at one part of the heart (the left atrium's sinus node) and is transmitted through the area between the atrium and the ventricles (AV node), to the other parts of the heart (Ventricles). In this disease, there is an abnormal electrical connection that bypasses the AV node a condition, which can lead to irregular or rapid heart rates.

Causes;

The cause of this disease is an abnormality in the electrical circuit within the heart. In addition to the normal electrical circuit, patients with WPW have an additional direct connection between two portions of the heart. The cause of the abnormal electrical circuit is unknown, but most patients are born with the problem.

Symptoms;

Symptoms usually are due to [Rapid Heartbeat](#) that leads to [Palpitations](#) and other associated symptoms such as dizziness or chest pain. Some patients, however, never develop any significant heart problems, and the diagnosis is made during routine evaluations.

Diagnosis;

- A. A diagnosis is made by abnormalities (delta waves) detected on the EKG that suggest the possibility of the disease.
- B. If these findings are noted on the EKG, then additional testing by a heart specialist is needed. These tests may include a 24-hour ambulatory heart monitoring using a Holter monitor device or EPS (intracardiac electrophysiology studies) that can identify the location of the "accessory" pathway of WPW.

Occasionally, the diagnosis is made on a routine EKG, while other times the diagnosis is made when a patient has a rapid or irregular heart rate.

Treatment;

- C. In the absence of any symptoms, no particular treatment is necessary. However, if any of the above symptoms develop, patients should immediately contact their physician.
- D. Patients who develop symptoms can be treated either with medicines or with surgery. Medicines used to treat the disease include Sotalol, Amiodarone, Quinidine, Procainamide, and Flecainide. If the patient is critically ill, an immediate shock to the heart may need to be applied.

In general, medicines such as Digoxin, [Calcium](#) channel blockers (such as Verapamil or Diltiazem), and beta-blocker (such as Atenolol or Metoprolol) should be avoided.

In some patients, however, the treatment of choice is radio frequency ablation, in which a heart specialist uses radio signals delivered within the heart to destroy the abnormal electrical circuit.

Similar Conditions

Any condition that can lead to a rapid or [Irregular Heartbeat](#) can be present with similar symptoms. These include [Atrial Flutter](#), atrial fibrillation, AV nodal re-entry, multifocal atrial tachycardia, junctional tachycardia, and ventricular tachycardia.