MANAGING YOUR ECOND-DEGREE HEART BLOCK

A heart block is a disturbance in electrical signals in the heart. Second-degree heart block affects the AV node (type I block) or conduction below the node (type II block). The ventricles may not contract as often as they should because of a problem with the impulses.

> Block Right

> > ventricle



SA node

AV node

Right atrium

The cause is not always known. Heart conditions such as coronary artery disease and prior heart attacks can cause a heart block.

Half the people with second-degree heart block have no symptoms. Those with symptoms have fainting and feel tired and lightheaded.

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What Is Second-Degree Heart Block?

The heart is a muscular pump with four chambers, two upper (left and right atria) and two lower (left and right ventricles). These contract and pump blood. Special tissue in the heart produces and sends electrical impulses to make the muscle contract. Normal electrical signals start from the sinoatrial (SA) node in the wall of the right atrium. From there the signal goes to the left atrium and reaches the atrioventricular (AV) node between the atria and ventricles. The signal then goes to the left and right bundle branches and finally the ventricles. There it stimulates ventricles to contract.

Heart block refers to a delay of electrical signals from the atria through the AV node. Second-degree heart block is one of three types of heart block; the others are first-degree and thirddegree (or complete). It affects the AV node (type I block) or conduction below the node (type II block). The atria contract normally, but the ventricles may not contract as often as they should because of the delayed impulses.

People with type II block are at risk for complete heart block, cardiomyopathy (disease of heart muscle), or death from asystole (the heart stops beating).

What Causes Second-Degree Heart Block?

About half the time, the cause of the type I heart block is unknown. Most other times, some type of heart disease exists, perhaps damage from a heart attack (myocardial infarction) or myocarditis (inflammation, or swelling, of heart muscle). Drugs, such as digoxin, or a congenital heart abnormality (present at birth) are other causes. Type II block usually results from heart disease.

What Are the Symptoms of Second-Degree Heart Block?

People may have no symptoms. When present, symptoms relate to not enough blood being pumped by the heart: feeling very tired, light-headed, or faint (syncope). Severe heart block can cause chest pain (angina) or stroke (not enough blood flow to copyright @ 2012 by Saunders the brain).

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Your doctor will do electrocardiography (ECG) to see whether you have a heart block.

> If you have symptoms, you will likely need a pacemaker to help your heart pump enough blood to meet your body's needs. A specialist who treats heart diseases (cardiologist) will determine the best type of pacemaker for you.

Don't exercise until your

doctor says that you can.

Eat a heart-healthy diet.



How Is Second-Degree Heart Block Diagnosed?

The doctor uses electrocardiography (ECG) for diagnosis. ECG measures the heart's electrical activity and will usually show some impulses from the atrium not reaching the ventricles.

How Is Second-Degree Heart Block Treated?

People without symptoms and no heart disease may not need any treatment.

Those with symptoms may need a pacemaker. Pacemakers are small electrical devices with a wire to the heart muscle that tells the ventricles to contract regularly (fixed-rate pacers) or to beat faster because of need for more activity (demand pacers). Pacemakers may be attached outside the body or implanted inside. New pacemakers are safer and better than old ones, but 2012 by Saun people should still be careful around strong magnetic or ultrasonic forces, such as those used in airport security screening.

DOs and DON'Ts in Managing Second-Degree Heart Block:

- **DO** eat a heart-healthy diet, low in fat and cholesterol.
- **DO** lose weight.
- **DO** stop smoking.

DO call your doctor if you have dizziness, fainting, chest pain, or shortness of breath.

 \bigcirc **DON'T** exercise until your doctor says that you can. cai

FOR MORE INFORMATION

Contact the following source:

- The American Heart Association Tel: (800) 242-8721
- Website: http://www.americanheart.org
- American College of Cardiology Website: http://www.acc.org

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