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Examiners

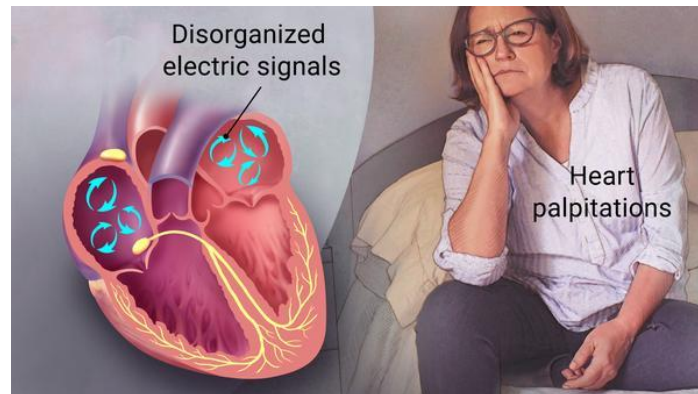
Session 302 Hour 3

FMCSA NRCME Accredited Training Session 302, Hour 3, Slide 8, Arrhythmias

Atrial Arrhythmias

Atrial fibrillation

Also called: AF, a-fib



Source

An irregular, often rapid heart rate that commonly causes poor blood flow. The heart's upper chambers (atria) beat out of coordination with the lower chambers (ventricles). This condition may have no symptoms, but when symptoms do appear they include palpitations, shortness of breath, and fatigue. Treatments include drugs, electrical shock (cardioversion), and minimally invasive surgery (ablation).

Atrial Flutter

A condition in which the heart's upper chambers (atria) beat too quickly.

Rapid contractions of the upper chambers of the heart may spread to the lower chambers, resulting in rapid heartbeats. Symptoms may include a racing heart (palpitations), shortness of breath, and dizziness. Medications, electric shock, or procedures that destroy abnormal tissue in the heart may be used to restore a normal heartbeat, control heart rate, or prevent blood clots.

Atrial Tachycardia

Atrial tachycardia (AT) is a type of abnormal heart rhythm, or arrhythmia. It occurs when the electrical signal that controls the heartbeat starts from an unusual location in the upper chambers (atria) and rapidly repeats, causing the atria to beat too quickly.

Multifocal Atrial Tachycardia

Multifocal atrial tachycardia (MAT) is a rapid heart rate. It occurs when too many signals (electrical impulses) are sent from the upper heart (atria) to the lower heart (ventricles). The external structures of the heart include the ventricles, atria, arteries and veins.

AV Nodal Reentrant Tachycardia

The triggers for typical AVNRT are usually premature atrial contractions and occasionally premature ventricular contractions.

AV Reentrant Tachycardia

Atrioventricular nodal reentrant tachycardia (AVNRT) is a regular supraventricular tachycardia (SVT) that results from the formation of a reentry circuit confined to the AV node and perinodal atrial tissue. Because of its abrupt onset and termination, AVNRT is categorized as a paroxysmal SVT (PSVT).

Wolff-Parkinson White Syndrome

In Wolff-Parkinson-White (WPW) syndrome, an extra electrical pathway between your heart's upper and lower chambers causes a rapid heartbeat. The condition, which is present at birth, is fairly rare. The episodes of fast heartbeats usually aren't life-threatening, but serious heart problems can occur.

Ventricular Arrhythmias

Brugada Syndrome

Brugada (brew-GAH-dah) syndrome is a rare, but potentially life-threatening heart rhythm disorder that is sometimes inherited. People with Brugada syndrome have an increased risk of having irregular heart rhythms beginning in the lower chambers of the heart (ventricles).

AV Block

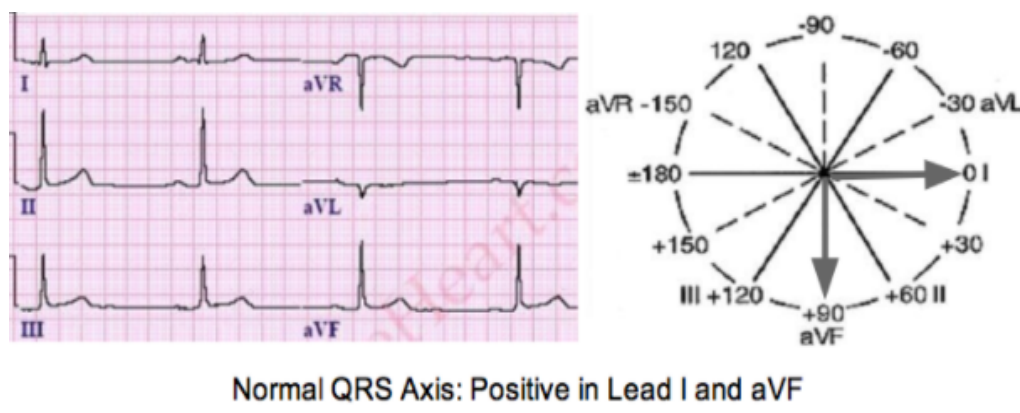
Heart block, also called AV block, is when the electrical signal that controls your heartbeat is partially or completely blocked. This makes your heart beat slowly or skip beats and your heart can't pump blood effectively. Symptoms include dizziness, fainting, tiredness and shortness of breath.

Bundle Branch Block

A bundle branch block is either a complete or a partial interruption of the electrical pathways inside the wall of the heart. A block in the right bundle branch can occur in people who otherwise seem normal. If it happens with a heart attack, it can be a sign of serious heart muscle damage.

Axis Deviation

Left axis deviation is defined as the major QRS vector, falling between -30 and -90 degrees. Right axis deviation occurs with the QRS axis and is between $+90$ and $+180$ degrees. Indeterminate axis is between ± 180 and -90 degrees. This is summarized in the image below.



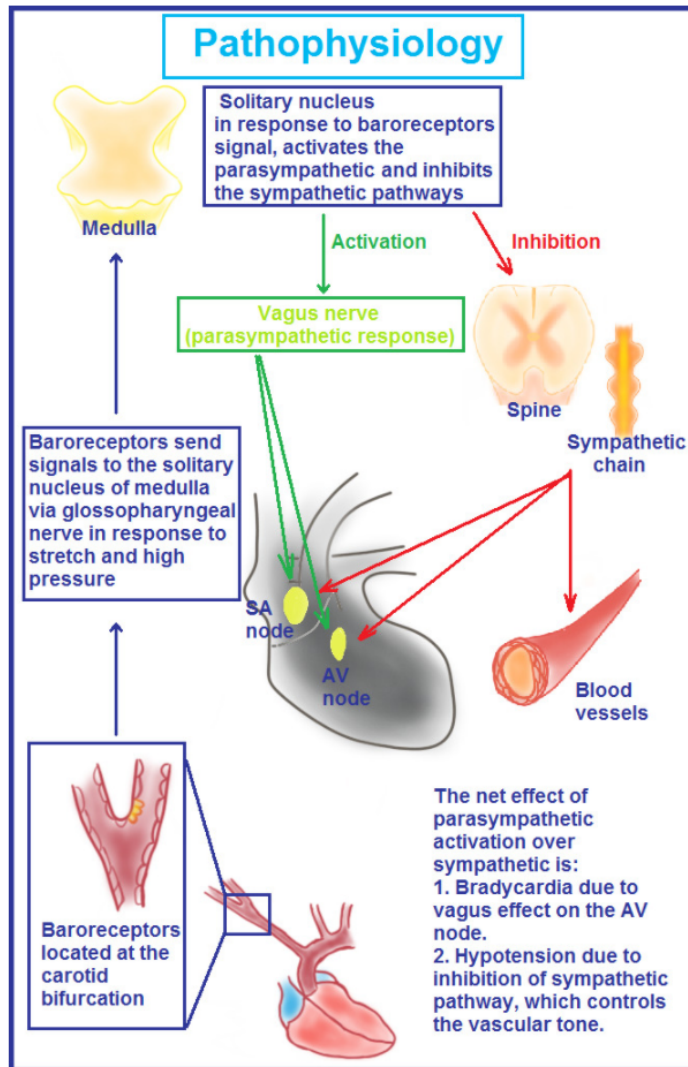
Neurocardiogenic syncope

Neurocardiogenic syncope, also known as vasovagal neurocardiogenic syncope, is a fainting spell that occurs when the body overreacts to certain triggers, like intense emotion, the sight of blood, extreme heat, dehydration, a long period of standing or intense pain.

Hypersensitive carotid sinus.

This overreaction is called carotid sinus hypersensitivity. Any pressure on the artery may cause this reaction; this includes wearing tight clothing around the neck or even turning the head.

When hypersensitivity is accompanied by a brief blackout that results in a fall it is known as carotid sinus syndrome.



Pathophysiology of carotid hypersensitivity syndrome (CHS). Contributed with Permissions by Antoine Kharsa M.D