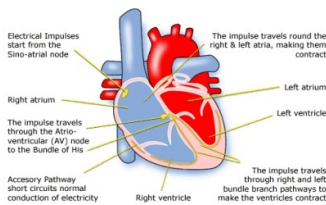


PAT – PAROXYSMAL ATRIAL TACHYCARDIA

Have you ever felt like your heart was going to beat out of your chest? Then a few minutes later, everything is back to normal? If these episodes are happening more and more frequently, you should see a doctor.

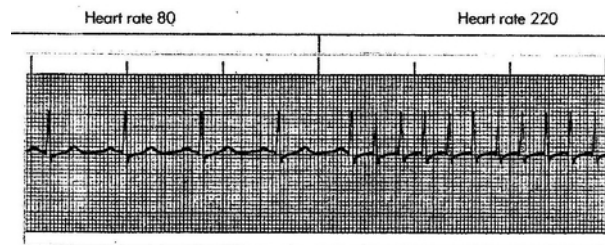
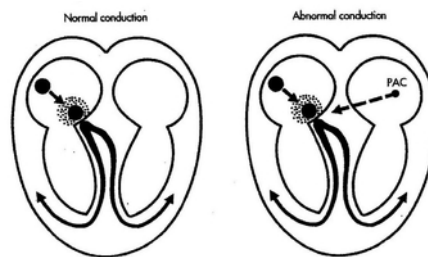
The heart is a four-chambered, two-stage electrical pump. A normal heart rhythm occurs when a group of special pacemaker cells located in the upper right chamber of the heart (atrium) called the sinus node initiates an electrical impulse. This impulse in turn stimulates the cells in the atrial wall to contract and empty its contents down into the ventricles. Then the ventricles contract in turn and blood is pumped out of the heart into the circulatory system. In normal heart function there is only one electrical pathway between the upper and lower chambers. Generally these impulses come at a rate of 50 – 100 times per minute. In times of increased activity, such as running or jumping, or intake of coffee, the heart rate can increase. However, sometimes a different area of the atrial wall becomes irritable or excited and escapes from the normal electrical pathway and can cause an extra beat or a skipped beat and even sometimes a faster rhythm. Usually an episode like this does not cause any problem. Sometimes these extra beats can string together and cause a rapid, regular heart rate caused **paroxysmal** (an episode of sudden onset) **atrial tachycardia** (PAT -a heart rate of greater than 100 beats per minute). PAT is also known as **paroxysmal supra-ventricular tachycardia** (PSVT- 130 – 230 beats per minute).

Supraventricular Tachycardia



Special Points of interest:

- Have you ever felt like your heart was going to beat out of your chest? Then a few minutes later, everything is back to normal? If these episodes are happening more and more frequently, you should see a doctor.



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In PAT it will seem as though the heart is racing all of a sudden without any cause and is many times referred to as “heart palpitations” or an anxiety attack. PAT can stop as suddenly as it started. In most cases PAT is not life threatening, self- limited and benign but it can be very alarming and uncomfortable.

PAT – PAROXYSMAL ATRIAL TACHYCARDIA—Continued

“In most cases PAT affects more women than men; most often develops at age 20-30 but can occur at any age; occurs most often in those that are very anxious, under stress or physically fatigued; occurs in those with an overactive thyroid gland; those who use caffeine or alcohol in excess; those with respiratory illness, low potassium, low magnesium or valvular heart disease.”

RISK FACTORS: There are several risk factors associated with an increased chance of have an attack of PAT. In most cases PAT affects more women than men; most often develops at age 20-30 but can occur at any age; occurs most often in those that are very anxious, under stress or physically fatigued; occurs in those with an overactive thyroid gland; those who use caffeine or alcohol in excess; those with respiratory illness, low potassium, low magnesium or valvular heart disease. Other factors include smoking, gallstones and fevers. It is common to observe palpitations during hormonal surges such as puberty, pregnancy and menopause. After the triggers stop, then usually the palpitations also stop.

SYMPTOMS: If you have any of these symptoms, they may or may not be due to PAT. It is best to see a physician to determine the cause. Symptoms include: rapid heartbeat or palpitations; weakness, dizziness or feeling faint; shortness of breath and anxiety; chest discomfort and even on rare occasion a loss of consciousness. If PAT lasts for long periods or is associated with other symptoms such as an increased severity and chest, shoulder, neck or arm pain, then a doctor should definitely be consulted.

DIAGNOSIS: Diagnosis may be difficult if one has not kept a good journal of when the events have occurred, what activity was happening and food or drink was being consumed.

Tests may include the following:

- Electrocardiogram (ECG) – Measures the electrical activity of the heart.
- Implantable Loop Recorder (ILF) – Small device that is surgically implanted under the skin of the chest and can be left in place for up to a year or longer to diagnose abnormal heart rhythms.
- Holter Monitor – This is temporary portable monitoring system that records cardiac activity for 24 or more hours either periodically or continuously. During the same period the person will keep a journal of his activities.
- Electrophysiologic Study (EPS) – An invasive heart study where electrical wires are placed in the heart through a small puncture in the veins in the groin. These wires map the electrical conduction system of the heart to locate the source of the abnormality.
- Echocardiogram – This is an ultrasound exam of the heart to exclude structural heart disease.
- Blood Tests – Laboratory tests to look for abnormalities in electrolytes or thyroid function.

TREATMENT: If you have an episode of PAT, there are techniques that you can try on your own to interrupt the fast heartbeat.

- Valsalva Maneuver – Hold your breath and strain as if you were trying to have a bowel movement.
 - Try to cough while sitting with your upper body bent forward.
 - Try splashing ice water on your face!
 - Carotid Sinus Massage – The doctor applies pressure to the carotid artery in the neck for a few seconds to reset the electrical signals and return the heart rhythm to normal. The doctor may train you to do the massage.
-

PAT – PAROXYSMAL ATRIAL TACHYCARDIA—Continued

- There are some drugs that can slow the conduction of electrical signals such as: calcium channel blockers like Verapamil or Diltiazem, Digoxin, beta blockers such as Atenolol or Metoprolol.
- Emergency treatment may include an electrical cardioversion and IV medication.
- Cardiac ablation – Treatment for those with repeated episodes in which a procedure is performed to identify and destroy the abnormal portion of cardiac tissue that is causing the arrhythmia.
- Pacemaker – In those people that have not responded to any other treatment, a pacemaker can be implanted to override the fast heartbeat.

References: American Heart Association www.americanheart.org

Heart Rhythm Society www.hrsonline.org

ACA RECERTIFICATION PACKETS

If your ACA certification expires on June 30, 2014, you will receive a packet of information on how to recertify by mid-May. If you do not receive your packet, please contact the ACA office by phone or email. If you have moved since becoming certified, you must notify ACA of your new address or you may not receive your packet.

If your ACA Certification expires on June 30, 2014, you will need to recertify !

NOTE: You will NOT receive a recertification packet if your certification does not expire until June 30, 2015.

What to submit to ACA as proof of continuing education:

- certificates of attendance
- copies of transcripts that document class completion (multiply each qtr. credit x 10 and each semester credit x 15 to get CE credits)
- CE printouts from employer
- Lists of CE activities verified by manager signature

The documentation must include the following:

- Date(s) of attendance
- Title of activity
- Number of CE credit assigned or amount of time spent (1 hour of time equals 1 CE credit)
- Signature of person issuing or verifying the activity

NOTE: Any recertification postmarked between June 30, 2014 and August 31, 2014 must include a **\$ 40.00 late fee.**

After September 1, 2014, recertification is by re-examination.

PHLEBOTOMY: DO YOU ASK YOUR PATIENT THE RIGHT QUESTIONS?

Communication skills are essential when drawing blood in order to make the experience a positive one for the patient AND to make sure that everything is correct and done correctly. As a healthcare professional performing blood, a phlebotomist has a responsibility to ask for certain information BEFORE drawing blood.

- The CLSI standard requires that each conscious patient be asked to verbally state his name and confirm with another identifier such as date of birth. Make sure to ask a patient to state and spell both their first and last name. It is important to match what the patient states verbally with the order for drawing blood. Resolve any discrepancies BEFORE drawing blood. The guideline further states the labeled tubes must be shown to the patient and the name and date of birth be confirmed by the patient.
- Ask the patient if he has an arm preference. Patients that have had their blood drawn before would have knowledge of the best place to obtain a specimen and also the places that did not work. This information could be helpful and it shows the patient that you have respect for opinion. As phlebotomist you do not have to use the site recommended by the patient but could prove useful to you in obtaining a specimen with one attempt.
- It is also very important to ask the patient if he has had any history of fainting during prior blood draws. Sometimes a patient does not volunteer information about prior problems with blood draws such as fainting, bruising or problems with vein location. The more a phlebotomist knows about a patient's prior blood draws, the more successful the present draw will be.
- Ask the patient if he is taking any blood thinners and make sure to include aspirin. You may want to use a small gauge needle so that there will be a smaller size puncture site which will make it easier to stop the bleeding. This information is vital so that adequate pressure is held after the puncture so as to prevent bruising. It is also important to remind the patient to protect that arm from carrying any heavy objects to allow that fibrin network that is formed to repair the puncture site without being reopened.
- The CLSI guidelines still require that the patient be asked about any latex allergies even though most facilities are now using all latex free phlebotomy equipment. Do not depend on the patient to tell you.
- Always do a patient assessment before releasing an outpatient. The patient may not want to admit that he is not feeling well. Watch for signs of fainting – sweating, pallor in the face and any dizziness. Studies have shown that over 2 % of patients will pass out during or immediately following a blood draw.

ABP CONTINUING EDUCATION INFORMATION

A reminder that ABP, Inc. offers home study continuing education booklets to help you earn CE contact hours.

Call ABP at (574)277-0691 to order or visit ABP's website at

www.abpincorp.com to download an order form.

New and popular online modules available include:

Communication Skills: Neonate-Geriatric	All About Bed Bugs	Summertime Hazards
Nutrition, Diet and Feeding Patients	Routine Venipuncture	MRSA Infections
Medical Coding: E Codes	Medical Coding: V Codes	Patient Rights
Chronic Fatigue Syndrome	HIPAA Security Rules	Introduction to Tuberculosis
Seasonal Flu	Atrial Fibrillation	Biological & Chemical Terrorism