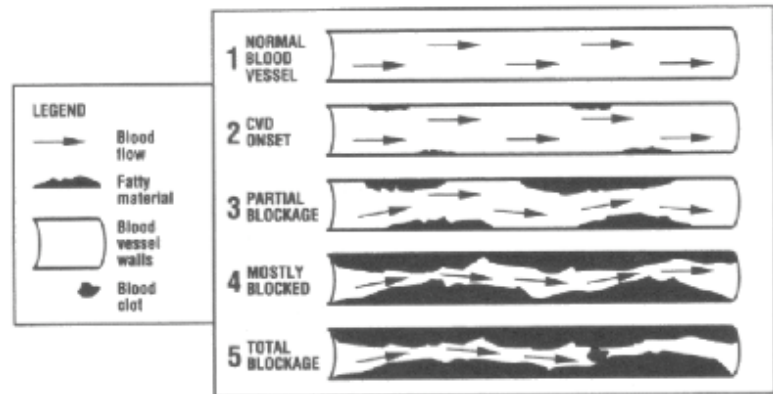


Cardiovascular Disease (CVD)

Cardiovascular diseases are conditions that affect blood vessels and/or the heart. The picture to the right is an example of a progression from CVD to the full blockage of a blood vessel. This could cause either a heart attack (coronary arteries) or a stroke (brain).



Angina

(CLSM 8:6)

Angina pectoris is a condition where the coronary arteries (arteries that feed the heart itself) are unhealthy. Under physical or emotional stress, these arteries do not have the ability to dilate enough to maintain the necessary flow of blood to the heart. This can cause the heart muscles to have a lack of oxygen, and an “angina attack” occurs. The main characteristics of an angina attack (that differentiate it from a heart attack) are as follows:

- Provoked by _____
- Seldom lasts for more than _____
- Relieved by _____
- Relieved by _____ (nitroglycerin)

*If the patient can't administer the medication themselves, DO NOT do it for them.

*A maximum of three doses of nitroglycerin should be taken, one every 3-5 minutes.

*If the angina attack is in any way different, or more severe than usual, EMS must be called.

Heart Attack

(CLSM 8:6-7)

A heart attack, or *myocardial infarction*, is caused by a severe lack of oxygen to the heart muscle. Some of the build-up in the coronary arteries ruptures, causing a blood clot to form which can then obstruct the flow of blood to the heart muscle.

Signs & Symptoms:

- The pain may occur suddenly and may come when the patient is at rest
- Feels like a squeezing, burning, or intense pain in the chest which often radiates across the chest
- Pain radiates to shoulders, arms, neck, back or jaw
- Trouble breathing, shortness of breath
- Anxiety or fear
- Shock
- Nausea and weakness
- Denial of symptoms

Treatment:

- Monitor & maintain ABC's
- **Call EMS** (this is your main priority for a conscious patient)
- Position of comfort (usually semi-sitting)
- Check for medication
- Loosen tight clothing
- Treat for shock

Cardiac Arrest

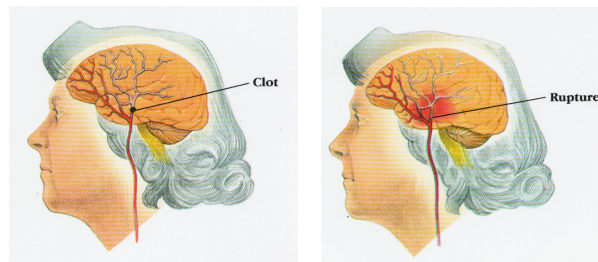
(CLSM 8:7)

Cardiac arrest means that the heart has stopped beating properly (ie. you will not feel a pulse). This can occur suddenly, or can be a complication (such as *ventricular fibrillation*) developing from a heart attack. Because blood is not circulating through the body, tissue damage begins and CPR must be started immediately to restore some circulation through the body.

Stroke

(CLSM 8:7-8)

Also called a cerebrovascular accident (CVA), a stroke occurs when blood vessels in the brain become blocked (~80%) or rupture (~20%), causing the brain cells to be deprived of oxygen. Strokes can occur spontaneously while a person is at rest.



Signs and Symptoms:

- _____
- Dizziness/Loss of Balance
- Trouble _____ & Understanding
- Vision Problems
- Lack of muscle control on one side of the body
- Unequal _____
- Anxiety, agitation
- Decreased LOC
- Loss of bowel/bladder control
- Shock
- Seizures

Treatment:

- Monitor & maintain ABC's
- Call EMS
- Position of comfort (semi-sitting) for conscious patient
- Loosen tight clothing around neck and chest
- Recovery position with _____ up for unconscious patient
- Treat for shock

Note that the side of the body affected by the stroke is the opposite of the side of the brain that is suffering from a lack of oxygen. Also note that if the victim is in lateral position, the weaker side should be placed up to protect the blood vessels and nerves on the affected side.