

## The Dayton Heart Center

**Angina** - (Angina Pectoris): Pain or discomfort due to a lack of oxygen to the heart muscle. It may manifest itself as pain or discomfort, heaviness, tightness, pressure or burning, numbness, aching, tingling in the chest, back, neck, throat, jaw or arms.

**Angiography** - An imaging technique that provides a picture, called an angiogram, of blood vessels; an x-ray that uses dye to detect bleeding in the gastrointestinal tract.

**Angioplasty** - Permits us to enlarge narrowings in coronary arteries caused by accumulated fatty deposits, to increase blood flow through the artery. An insertion of a balloon at the end of a catheter, blown up to compress the clogged area of the artery against the artery wall and then removed.

**Anticoagulants "Blood Thinners"** - Medications that slow blood clotting time. Anyone on anticoagulants needs regular blood tests for clotting time. One test is called prothrombin time or PT or Protime.

**Arrhythmias or Dysrhythmias** - Abnormal rhythms of the heart beat. Premature contractions: can be atrial or ventricular. May or may not be dangerous. Interrupts the regular heartbeat rhythm.

**Fibrillation:** can be atrial or ventricular. Ineffective beats.

**Tachycardia:** fast heart beat, usually over 110 a minute.

**Bradycardia:** slow heart beat, usually under 50 beats a minute.

**Artery/arteries** - Blood vessels that carry oxygenated blood.

**Atherectomy** - A procedure that uses a catheter and special cutting or grinding tools to remove plaque from artery walls. (Rotorooter).

**CABG "Cabbage"** - Coronary Artery Bypass Graft - Surgery done to bypass the blocked coronary artery. Uses a vein from the leg or chest to carry the blood as "a bridge" around the blocked coronary artery.

**Cardiac Cath or Cardiac Catheterization** - A catheter is inserted into a blood vessel in the arm or groin (after a local anesthesia is given) and threaded up to the heart, a dye is injected and X-rays will be taken of the hear arteries. if there is a blockage in any artery it is usually easily seen. After the procedure, the catheter is removed and you may be able to go home.

**Cardiac Catheterization** - In this procedure a doctor guides a thin plastic tube or catheter through an artery or vein in the arm or leg and into the heart and the coronary arteries in the heart. This test can measure blood pressure and how much oxygen is in the blood, and provide other information about the pumping ability of the heart muscle or for treatment. When a catheter is used to inject dye into the coronary arteries, this is termed coronary angiography or coronary arteriography . If a catheter has a balloon on the tip, the procedure known as percutaneous transluminal coronary angioplasty (P.T.C.A.) can be done. Catheterization can also be performed on infants and children to examine or treat congenital cardiac defects.

**Cardioversion** - a procedure which uses electrical current to change an irregular heart rhythm to a normal heart rhythm.

**Carotid Doppler Study** - This is a painless ultrasound study of the four arteries in the neck which carry blood to the brain. It is used to learn about plaque blockages in these arteries in people who have TIAs, or stroke-like symptoms.

**Catheter** - A thin, flexible tube used in cardiac procedures.

**Cerebral Angiography** - X-ray examination of intracranial blood vessels after injection of radiopaque dye into the neck (carotid) artery. Whether arteries or veins are visualized depends on how long the film is exposed after the injection. Cerebral angiography detects solid lesions by showing blood-vessel deformities or displacement. It reveals areas without blood vessels, where cysts and abscesses of the brain are likely to exist.

**Coronary Arteries** - Four major coronary arteries carry freshly oxygenated blood to the heart muscle. Known as: left main coronary artery, Circumflex coronary artery, Left anterior descending coronary artery and Right coronary artery. Can be seen on the exterior of the heart. Most commonly blocked arteries of the heart due to plaque, lipids and blood clots.

**Coumadin Clinic** - Coumadin is a drug used to help prevent clots from forming in the blood vessels. Clots can block the blood supply to vital organs, like the brain or heart, and cause stroke, heart attack or other problems. By reducing the blood's ability to clot, the risk of these complications can also be reduced. For patients who take Coumadin, The Dayton Heart Center offers a special clinic to help manage Coumadin dosage and monitor the blood's clotting ability.

**Echocardiogram** - A study using high-frequency sound waves to picture or visualize the heart chambers, the thickness of the muscle wall, the heart valves and major blood vessels located near the heart. A non-invasive procedure.

**EECP® Therapy** - Offered exclusively by Vasomedical, Inc. EECP therapy is a safe, non-invasive, outpatient treatment option for patients suffering from ischemic heart diseases such as angina and heart failure. EECP therapy has helped thousands of patients. In fact, clinical studies show, over 75% of patients benefit from EECP therapy and sustain improvement up to three years post-treatment

**EKG or ECG - Electrocardiogram** - A graph of the electrical conduction system of the heart.

**Electrolytes** - Elements or chemicals needed to enable the body and heart to work properly. The most frequently tested by blood test: Sodium, Potassium, Chloride. If the levels are too high or too low in your blood, it may cause cardiac (heart) problems.

**Enzymes (Cardiac Enzymes)** - When the heart is injured (such as a heart attack) certain enzymes (chemicals) are released. They are called LDH, SGOT and CPK.

**Exercise Stress Test** - A stress test, sometimes called a treadmill test or exercise test, helps physicians find out how well the heart handles work. As the body works harder during the test, it requires more oxygen and the heart has to pump more blood. The test can show if the blood supply is reduced in the arteries that supply the heart. It also helps doctors know the kind and level of exercise appropriate for a patient.

**ICD** - An implantable cardioverter / defibrillator (I.C.D.) is a device designed to administer an electric shock to control tachyarrhythmias - the rapid, uncoordinated activation of individual heart fibers - and restore a normal heartbeat. The power source is implanted in a pouch beneath the skin of the chest or abdomen and is connected to patches placed on the heart. Newer devices can be installed through blood vessels. This eliminates the need for open-chest surgery.

**Invasive Procedure** - A procedure, test or surgery that involves going through the skin or muscle or into a vein or artery, such as a Cardiac Catheterization.

**NTG - Nitro - Nitroglycerine** - A medication that expands or relaxes arteries to enable blood to flow more easily. It can be taken by mouth, spray, skin patch or intravenously.

**Non-invasive Procedure** - A procedure that can be done outside of the body, such as an X-ray or EKG.

**Pacemaker** - A small, battery-operated device that helps the heart beat in a regular rhythm. Some are permanent (internal) and some are temporary (external). It can replace a defective natural pacemaker or blocked pathway.

**Phlebotomy** - blood draw

**Pulse** - The beat of the heart felt in an artery.

**Radial:** most common pulse site. Found in the wrist directly under the thumb.

**Brachial:** inside the elbow, little finger side.

**Femoral:** inside the groin.

**Carotid:** on each side of the neck, under the outer jaw.

**Apical:** over the lower half of the heart, between the breastbone and left nipple and hard to feel. A stethoscope is usually needed to get a clear sound.

To take a pulse, use the first and second fingers and count the beats for 60 seconds.

**Nuclear Cardiology Studies** - Provide information on blood flow to the heart muscle and/or heart muscle function. Performed by injecting a small amount of radioactive tracer intravenously.

**Plaque** - A build up in the lining of a damaged artery. It can be caused by high blood cholesterol or smoking.

**Risk Factors** - Habits or characteristics which can increase the likelihood of developing heart disease.

**1. Nonmodifiable** (risk factors that cannot be changed):

- a. Family history of coronary disease or stroke
- b. Age
- c. Sex

**2. Modifiable** (risk factors that can be changed):

- a. Smoking
- b. High Blood Pressure (hypertension)
- c. Diet high in animal fats
- d. Sedentary lifestyle (couch potato)
- e. Diabetes
- f. Stress
- g. Type "A" personality
- h. Obesity
- i. Excessive use of alcohol

**Rotablator** - A diamond-tipped burr drill is moved through a blockage disintegrating plaque deposits as it advances. It is often useful in long blockages which contain calcium deposits.

**Stent** - Devices that are placed in the artery to keep the inner wall of the artery open. Small metal coil or mesh tube, permanently left in the artery.

**Stress Echo Test** - A stress test coupled with an echocardiogram before and after exercise. Your doctor will be able to tell if you have blocked or narrowed heart arteries by viewing how your heart muscle contracts in response to exercise. This test takes about an hour to complete.

**Tilt Table** - Permits us to evaluate loss of consciousness for unknown reasons. Performed by placing a patient on a padded table, which is tilted while blood pressure and heart rate changes are monitored.

**Transesophageal Echocardiogram** - A scope with an ultrasound probe mounted on its tip is passed through the mouth into the esophagus just behind the heart. This allows the cardiologist performing the test to obtain very clear pictures of your heart and the aorta (the main artery in the chest). This test is often used when clear pictures of the heart cannot be obtained from the outside of the chest during an echo-doppler. You will receive light sedation for this test to assure that you are comfortable.