

Coumadin Therapy in Cardiovascular Disease

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Coumadin is a prescription medication that is used to prevent the formation of blood clots, and belongs to a group of medications called anticoagulants. These medications are often referred to as “blood thinners” although they do not actually thin the blood but instead help to prevent blood from clotting. Coumadin is used in patients that are at an increased risk of forming blood clots, such as patients with an artificial heart valve, patients with an irregular heart rhythm such as atrial fibrillation, and patients with recent heart attacks involving the front of the heart’s main pumping chamber. Coumadin is also used to treat people who have already shown an increased risk of having blood clots or have had a prior abnormal blood clot. Those patients include some patients with prior strokes, a blood clot in a leg vein, or a blood clot that has traveled to the lungs from a leg vein. Thus, Coumadin is a very important drug in cardiac and vascular disease.

Coumadin works by interfering with the availability of Vitamin K for the activation of several proteins in the blood that act as clotting factors. Thus, clotting is interfered with and it takes longer for clots to form. The goal of therapy is not to prevent clotting completely but to balance clotting and clot prevention. Coumadin therapy must be therefore monitored very closely with blood testing. The test to monitor Coumadin therapy is called a PT or prothrombin time, and is expressed as a ratio called the INR. For most of the common uses of Coumadin the desired INR is between 2 and 3.

The major complication of Coumadin therapy is bleeding. Patients on anticoagulation should tell their doctor about any falls or accidents, and any evidence of bleeding such as blood in urine or stools, dark stools, nosebleeds, vomiting blood or coughing up blood. Patients should avoid contact sports, and the use of very sharp blades or power tools.

Dietary factors, over the counter drugs, and prescription drugs can interfere with Coumadin anticoagulation. Patients should notify the doctor managing their anticoagulation if they are placed on new medications. This includes medicines taken for a short period of time such as antibiotics. Patients should also avoid the use of aspirin and anti-inflammatory drugs such as ibuprofen or naproxen. Alcohol intake and excessive intake of acetaminophen (Tylenol) can alter the intensity of anticoagulation as well. Foods high in Vitamin K can decrease Coumadin’s effectiveness.

Coumadin is a very safe and effective drug that saves lives, but must be monitored carefully. Tell your doctor about any new medications, changes in diet, or use of vitamins or over the counter products in order to insure your safety.