Pathway unstable angina pectoris pdf

Continue

The main goals of angina treatment are to Prevent or reduce ischemia Prevent future ischemic events To relieve symptoms during an acute attack, sublingual nitroglycerin is a potent smooth-muscle relaxant and vasodilator. Its main sites of action are in the peripheral vascular tree, especially in the venous or capacitance system, and in coronary blood vessels. Even severely atherosclerotic vessels may dilate in areas without atheroma. Nitroglycerin lowers systemic veins, thus reducing myocardial wall tension, a major determinant of myocardial oxygen need. Sublingual nitroglycerin is given for an acute attack or for prevention before exertion. Dramatic relief usually occurs within 1.5 to 3 minutes, is complete by about 5 minutes, and lasts up to 30 minutes. The dose may be repeated every 4 to 5 minutes are should always carry nitroglycerin tablets or aerosol spray to use promptly at the onset of an angina attack. Patients should store tablets in a tightly sealed, light-resistant glass container, so that potency is not lost. Because the drug deteriorates quickly, small amounts should be obtained frequently. To prevent ischemia, several classes of drugs are used: Antiplatelet drugs: All patients diagnosed with coronary artery disease or at high risk of developing CAD Beta-blockers: Most patients, unless contraindicated or not tolerated Long-acting nitrates: If needed Calcium channel blockers: If needed Calcium channel blockers: If needed Calcium channel blockers and inhibits cyclooxygenase and platelet aggregation. Other antiplatelet drugs (eg., clopidogrel, prasugrel, and ticagrelor) block adenosine diphosphate-induced platelet aggregation. These drugs can reduce risk of ischemic events (MI, sudden death), but the drugs are most effective when given with aspirin. Patients unable to tolerate one should receive the other drugs are most effective when given with aspirin. Patients unable to tolerate one should receive the other drugs. Beta-blockers block sympathetic stimulation of the heart and reduce systolic BP, heart rate, contractility, and cardiac output, thus decreasing myocardial oxygen demand and increase the threshold for ventricular fibrillation. Most patients tolerate these drugs well. Many beta-blockers are available and effective. Dose is titrated upward as needed until limited by bradycardia or adverse effects. Patients who cannot tolerate beta-blocker are given a calcium channel blocker with negative chronotropic effects (eg, diltiazem, verapamil). Those at risk of beta-blocker intolerance (eg, those with asthma) may be tried on a cardioselective beta-blocker (eg, bisoprolol) perhaps with pulmonary function testing before and after drug administration to detect drug-induced bronchospasm. Long-acting nitrates (oral or transdermal) are used if symptoms persist after the beta-blocker dose is maximized. If angina occurs at predictable times, a nitrate is given to cover those times. Oral nitrates include isosorbide dinitrate and mononitrate (the active metabolite of the dinitrate). They are effective within 1 to 2 hours; their effect lasts 4 to 6 hours. Sustained-release formulations of isosorbide mononitrate appear to be effective throughout the day. For transdermal use, cutaneous nitroglycerin patches have largely replaced nitroglycerin ointments primarily because ointments are inconvenient and messy. Patches slowly release the drug for a prolonged effect; exercise capacity improves 4 hours after patch application and wanes in 18 to 24 hours. Nitrate tolerance may occur, especially when plasma concentrations are kept constant. Because risk of myocardial infarction is highest in early morning, an afternoon or early evening respite period from nitrates is reasonable unless a patient commonly has angina at that time. For nitroglycerin, an 8- to 10-hour respite period. If given once a day, sustained-release isosorbide mononitrate does not appear to elicit tolerance. Ranolazine is a sodium channel blocker that can be used to treat chronic angina. Because ranolazine may also prolong QTc, it is usually reserved for patients in whom symptoms persist despite optimal treatment with other antianginal drugs. Dizziness, headache, constipation, and nausea are the most common adverse effects. Ivabradine is a sinus node inhibitor that inhibits inward sodium/potassium current in a certain gated channel (funny or "f" channel) in sinus node cells, thus slowing heart rate without decreasing contractility. It can be used for symptomatic treatment of chronic stable angina pectoris in patients inadequately controlled by beta-blocker alone and whose heart rate is > 60 beats/minute By Mika, Facty StaffFact CheckedUpdated: Jul 24, 2019Angina occurs when the heart does not receive sufficient oxygen due to narrowing of the arteries that carry blood to the heart. Not a condition on its own, angina is a symptom that indicates other, potentially serious, health issues including blocked arteries and heart disease. The best-known symptom of angina is a pain in or around the chest. Some people describe the pain as a pressure or squeezing in the chest or surrounding areas. Pain levels can vary depending on age, physical condition, and other individual factors. Sometimes, the pain spreads to other parts of the body, including the neck, arms, or jaw. Chest pain may also be a symptom of a heart attack. Exercise can exacerbate angina in some individuals. Sudden physical movement, such as running or other exercises, may provoke attacks, as can stress. Rest and medication can aid in reducing them, and a doctor can prescribe the best preventative and management options. Unstable angina increases the risk of a heart attack. A lack of blood flow is the most common trigger of this issue, which can cause unexpected attacks of pain. It's distinguished from stable angina by the fact that chest pain occurs even when a person isn't exerting themselves, or is brought on by light exertion. Unstable angina is an emergency that requires immediate medication attention. Pain in the arms, neck, and surrounding areas can also point to problems involving the heart and blood vessels. Pain originating from reduced blood flow to the heart can be felt in other areas, particularly the left arm and neck. In some cases, a person will only feel pain in the surrounding areas and not the chest itself. Therefore, it is important to seek medical evaluation, especially if the discomfort is associated with shortness of breath, dizziness, palpitations, or sweating. Genetics determine many of our physiological qualities, and mutations or other changes to DNA can increase an individual's risk of developing certain diseases. Men of South Asian descent are at a higher risk. Smokers, people with high blood pressure, high cholesterol, or diabetes, and those with close family members who have had heart attacks are at higher risk. too. Sudden pain may be a sign of unstable angina, and it often catches people off-guard. This is the difference between stable and unstable angina, however, can occur without obvious triggers and when a person is quietly resting. During an angina attack, people often experience intense pain lasting up to ten minutes. However, those with unstable angina report attacks and, therefore, requires immediate medical attention. People with angina experience excess sweating because their nervous system goes into overdrive, releasing hormones that cause this symptom. Sweating can also be a sign of a heart attack, but it is important to seek help regardless. Along with pain, people with angina may experience other symptoms such as vomiting and shortness of breath. Angina reduces oxygen delivery to the heart and other tissues, which may further contribute to pain and shortness of breath. Don't Ignore Angina pectoris is Latin for chest pain. It is not a heart attack, but it is a warning sign that you shouldn't ignore. It is a signal that you're at increased risk for heart attack. Learn the symptoms of angina, and seek immediate medical attention if you develop any of the symptoms. Angina pectoris is the medical term for chest pain or pressure. This feeling is caused by a temporary decrease in the amount of blood and oxygen flowing to your heart. When your heart muscle does not get enough blood to meet its need for oxygen, it may cramp. That causes the pain. Sometimes exercise, stress, or strong emotion can bring on angina. That's because each of these factors increases the heart's demand for oxygen. Extreme temperatures, alcohol, and cigarette smoking can also cause angina. Regardless of what brings it on, angina is a warning sign. Some part of your heart is not getting the blood and oxygen it needs. Angina is not a heart attack, but it is a warning sign of serious heart problems. Some blood is getting through to your heart but not enough. Unlike in a heart attack, this reduced blood flow usually does not cause permanent damage to your heart muscle. It does mean you probably have CHD and that your risk for a heart attack is high.

