

## **Unstable Angina Pectoris: A Case Report**

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### **Abstract**

**Introduction:** Angina pectoris that has one or more of the following characteristics is known as angina pectoris unstable. It lasts a long time 10 days and can happen at rest or with the least amount of effort. The nature of it is severe and intense.

**Patient Information** A 52-year-old male was admitted to AVBRH on dated 13/5/2021 with a chief complaint of chest pain, shortness of breathing, sweating, chest discomfort, arm pain, neck pain, jaw pain, dizziness, unexplained fatigue, anxiety.

**Investigation:** -Routine blood examination hemoglobin is decreased 8.5 gm /dl, RBC count is decreased 3.92 million /cell. WBC count is decreased. Electrocardiogram, cardiac marker, angiography, echocardiogram, stress testing. The doctor diagnosed unstable angina pectoris. 15 days ago, patients were admitted to Panjabrao hospital in Amravati with chief complaint of chest pain, shortness of breathing, sweating, chest discomfort, arm pain, neck pain, jaw pain. He was diagnosed with unstable angina pectoris and he took the treatment for that.

**The main diagnostic therapeutic intervention and outcome:** -after a physical examination and investigation doctor diagnosed a case of unstable angina pectoris. Ecosprin 75 mg. Tablet ranolazine 500 mg twice a day, beta-blockers 5 to 10 mg ones a day, calcium channel blocker 10 mg tablet, protein powder. Was given 5 days to healthy immune system fight disease conditions. **conclusion:** - He was a response to all medication as well as doctor treatment and his recovery was good.

**Keywords:** Angina Pectoris, Chest Pain, Shortness of Breathing, Chest Discomfort

### **Introduction**

Although many definitions of unstable angina have been presented, Braun Wald developed a classification system in 1989 to assure uniform categorization as well as diagnostic and prognostic information. This classification is intended to make it easier to communicate about these people, to help with decisions about diagnostic tests and therapy for specific patients, as well as a more precise foundation for enrolling patients in clinical trials and evaluating their outcomes. [1] During the survey, 385 patients with symptoms suggesting myocardial ischemia were sent to a special clinic from the participating practices, and 167 were diagnosed with unstable angina. Three of them died suddenly within three months, and 23 suffered an acute myocardial infarction seventeen of the twenty-six

issues happened within four weeks of the commencement of symptoms.[2]Newly diagnosed angina pectoris Angina is considered unstable when it initially begins, even if it is alleviated by rest and requires a constant level of effort to induce symptoms.) Previously stable exercise-induced angina but has become worsened as physical activity is lessened. When your heart isn't getting enough blood or oxygen, it's called a heart attack.It develops unstable angina. It could result in a heart attack. Angina is a form of chest discomfort that affects people of all ages. brought on by a blockage in the blood veins that supply the heart muscle (coronary vessels). And when a thrombus of atherosclerotic plaque forms in the coronary arteries, it becomes unstable.it sets off a set of circumstances that leads to thrombotic blockage of a coronary artery, either partial or complete.The acute coronary syndrome is a medical term for a heart attack that occurs suddenly. Acute coronary syndrome (ACS) is a kind of heart attack that occurs is divided into three types: stable Angina, non-ST segment elevation myocardial infarction, and ST-segment elevation myocardial infarction are the three types of myocardial infarction. No longer used are the phrases "transmural," "non-transmural," "Q wave MI," and "non-Q wave MI." [3] The distinctions between the various kinds of acute coronary syndromes are discussed in the following sections. The term "acute coronary syndrome" refers to a group of symptoms that includes unstable angina. This public health issue is still the world's greatest cause of death affecting a large portion of the population daily When it comes to the patient's condition, Health treatment and result, it's crucial to separate this from chest discomfort can be caused by a variety of factors., such as Angina continues to be steady. Patients rely on doctors to discern between different causes of chest pain;thus,doctors' Acute coronary syndrome symptoms and indicators should be recognized.[4]The emergency room is routinely visited by patients. Acute coronary syndrome, on the other hand, is a condition that might perhaps be treated in a non-hospital situation Throughout the years,there has been a lot of studies done on this finding the most acceptable and successfulfor assessing Angina pectoris and different types of angina types of Acute coronary syndrome (ACS) is a condition in which the therapeutic options, as well as diagnostic techniques, are available. Vasospasm of a coronary artery is a less prevalent cause (variant Prinzmetal angina). This vasospasm is caused by endothelial or vascular smooth muscle dysfunction.[5]

#### **Patient information**

Patients was admitted in Acharya Vinoba BhaveRural Hospital on dated 13/5/2021 with the complaint of chest pain, shortness of breath, sweating, chest discomfort, arm pain, neck pain, jaw pain. for 2 days.

#### **Primary concern and symptoms**

Primarily chest pain, shortness of breathswatting, chest discomfort, arm pain, neck pain, jaw pain. For 20 days these were the primary symptoms that were observed at the time of admission.

#### **Medical family and psychological history**

Patients had a medical history of unstable angina pectoris before 20 days. He took treatment for that but was not sure he belongs to a nuclear family there are 5 members in his family. All family members are healthy accept the patient

#### **Relevant past intervention with outcomes**

Unstable angina pectoris 20 days back for which he was hospitalized for 15 days 10 days after electrocardiogram, and angiography was observed he took treatment for that and his outcome was not good.

#### **Clinical findings: -**

**General Examination:** state of health was unhealthy, body build obese, the Hight of patients is 152 cm and weightare 55 kg. His vital parameters are normal.

**Timeline:** 20 daysago, he was admitted tothe hospital for 15 days for the treatment of unstable angina pectoris. Ecosprin 75 gm. Tablet ranolazine, beta-blockers, calcium channel blocker, protein powder. Was given 5 days is an investigation drugs beings studies to treat unstable angina pectoris.

#### **Diagnostic Assessment:**

**Diagnostic challenging:** -No challenging during diagnostic evaluation

**Diagnosis:** After a physical examination and investigation doctor diagnosed a case of unstable angina pectoris.

**Prognosis:** The prognosis was good.

#### **Therapeutic Intervention**

Medical management was provided to the patient Ecosprin 75 gm. Tablet ranolazine, beta-blockers, calcium channel blocker, protein powder. Was given he was taking all treatment and his outcome was good. His sign symptoms were reduced he was able to do his activities no any change ranolazine, beta-blockers, calcium channel blockers, protein powder. Treatment was started Ecosprin 75 gm. Tablet ranolazine, beta-blockers, calcium channel blocker, protein powder. Was given.

#### **Change in therapeutic interventions**

The patient's medication may be changed by the doctor, who may prescribe heparin (or another blood thinner) and nitroglycerin (under the tongue or through an IV). Other therapies include blood pressure, anxiety, irregular cardiac rhythms, and cholesterol medications (such as a statin drug).

**Outcome and follow up**

There was an improvement in hemoglobin level and WBC and RBC count.

**Important follow up diagnostic and other test results:** No

**Discussions**

Many diseases benefit substantially from logical classification in terms of determining prognosis and treatment options. For example, today's classification of a wide range of neoplasms based on the anatomic extent, microscopic appearance, and the presence of particular markers form the basis for determining the best treatment course.[6]The classification of people with acute myocardial infarction and congestive heart failure in cardiology has proved extremely useful for tracking and selecting therapy for individual patients, as well as comparing the outcomes of similar patients treated at different sites and times. The purpose of this article is to categorize angina that is in a state of instability.[7]This classification is meant to make it easier to communicate about these people, to help with decisions about diagnostic testing and therapy for specific patients, and to provide a more precise basis for enrolling patients in clinical trials and evaluating their outcomes.[8] And Angina pectoris, also known as stable angina, is a kind of chest pain that affects a small percentage of the population. Uncomfortable feelings are usually predictable and controllable. It's something you might notice while running or when you're stressed. Rest, nitroglycerin or a combination of the two usually relieves chest discomfort. Nitroglycerin relaxes coronary arteries and other blood vessels, lowering the volume of blood returning to the heart and relieving pressure on the heart. Relaxing coronary arteries improves blood flow to the heart.[9] Atherosclerosis of the coronary arteries is the underlying cause of unstable angina in nearly all patients with acute myocardial ischemia. Coronary artery constriction is produced by a nonocclusive thrombus that originates on a disturbed atherosclerotic plaque. The most prevalent cause of unstable angina is a heart attack. Vasospasm of a coronary artery is a less prevalent cause (variant Prinzmetal angina).[10] This vasospasm is caused by endothelial or vascular smooth muscle dysfunction. A substantial percentage of the population suffers from coronary artery disease. Moreover, those above the age of 35 accounts for a third of all deaths, are estimated to be caused by coronary artery disease. It is the leading cause of death among people in this age group. In the United States alone, this illness is estimated to affect about 18 million people. Men have a higher prevalence, but by the age of 75, the male and female rates are nearly equal.[11] Other risk factors include obesity, diabetes, hypertension, high cholesterol, smoking history, cocaine or amphetamine abuse, family history, chronic kidney disease, HIV, autoimmune disorders, and Anaemia, to name a few. The presenter's average age is 62, with women being older than men. African Americans are more likely than whites to appear at an early age. In unstable angina, blood flow blockages produce a shortage of oxygen and nutrients to the myocardium. Blood travels from the heart straight into the aorta and then into the coronary arteries, which nourish the heart's various parts. [12,13] The circumflex and left anterior descending arteries will be separated from the left coronary artery. After then, the primary branch will split into several smaller branches. The right coronary artery will also branch out into smaller branches. An obstruction in the blood supply to the myocardium causes unstable angina. Intraluminal plaque development, intraluminal thrombosis, vasospasm, and increased blood pressure are the most prevalent causes of blockage. [14,15,16]

**Conclusion**

The patient was admitted to the hospital with a chief complaint of shortness of breath, chest pain, sweating, chest discomfort, arm pain, neck pain, jaw pain. After all investigation, the patient was diagnosed with a case of unstable angina pectoris. In our case, it stresses the need for good clinical assessment, good nursing care by a trained nurse and the use of effective forensic studies is compulsory to secure patients from such a vital health condition. Significant revisions to existing guidelines for the diagnosis and management of unstable angina and non-Q-wave myocardial infarction are required based on evidence from clinical trials conducted within the last five years. The following suggestions should be taken into account while creating and implementing updated guidelines.

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