

Heart Innovation Research Program

# Early warning signs of heart disease and how they can be confused with other symptoms.

## Summary of Research

Cardiac-related prodromal symptoms: A complicated clinical challenge. O'Keefe-McCarthy, S., Ready, L., Francis, S-L. (2017). Practitioner, 42(1), 1-3. DOI:10.1097/01.NPR.0000511010.36961.

## Background

Recognition of early warning signs of developing heart disease by medical staff is important for targeting, screening, diagnosis and treatment of those at risk for future heart related events.

The early warning signs are subjective, variable, and may be sporadic. They may include: chest pain/discomfort, anxiety, fatigue, sleep disturbances, stomach complaints, dizziness, headaches, and/or shortness of breath.

Early warning signs may be misdiagnosed as being related to other conditions and not perceived as related to signs of an unhealthy heart.

People who have the early warning signs report same or similar symptoms during their hospitalization for a heart attack.

### **Case Study Abstract**

There can be temporary early warning signs months or days before a heart event, such as heart attack. This is a case study of 65-year old female, with type 2 diabetes. She went to the hospital after experiencing symptoms of nausea and vomiting, chest pain, and insomnia. She was diagnosed with a few different things, before being diagnosed with heart problems that was treated.

### Warning Signs

The early warning signs are ones that doctors can miss when diagnosing, screening and treating. These can include chest and arm pain, shortness of breath (SOB), unusual fatigue, dizziness, nausea and vomiting, headaches, sleep disturbances, and anxiety. They can occur weeks or months before the heart event and usually go away after the heart problem is fixed. These symptoms occur in 49-92% of all patients. These symptoms are easy to ignore as being unusual symptoms and are easily explained as part of other conditions, or they are not constant, so the patient may not think to alert their doctor to them.





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### Case Report

The patient, Mrs. S. was 65-years-old, had type 2 diabetes, hypertension, obesity, depression and high cholesterol. She had been intentionally losing weight, and was able to perform daily activities despite her conditions. She was on multiple medicines. Both her parents and a sibling reported heart disease.

For one month prior to her going to the hospital, she had nausea, vomiting and chest pain for a few minutes, every 2 days or so. She also experienced sleep disturbances. She went to the hospital twice before, but nothing was found wrong with her heart. On the visit for this case study, she was given medications for reflux. Her symptoms were not triggered by food, stress, or exertion. Based on her family history, risk factors and other diseases that can be related to heart disease, she was given an exercise stress test, and an echocardiogram. The tests showed that she had blockages in her arteries, and doctors used a catheter to do balloon therapy, to put in two stents to open the blockages.

#### Discussion

Health care professionals may not recognize the early warning signs, and patients may not be clear on the extent or the description of their symptoms, making it easy to miss the link to heart disease. This delay in recognizing they symptoms are related to an unhealthy heart may lead patients to worsening symptoms, or even death.

### **Diabetes and Heart Disease**

Early warning signs are often confused with symptoms related to diabetes or other illnesses associated with diabetes. Patients with diabetes who experience a heart attack often do not report chest pain as a symptom of their heart disease. Patients with diabetes often go unrecognized for heart attacks due to this lack of pain. Those with diabetes often report symptoms of increased shortness of breath, sudden nausea and vomiting, dizziness, and fatigue as example.

