

Early warning signs of heart disease in relation to pain and anxiety while in hospital, and in relation to other health conditions.

Summary of Research

O'Keefe-McCarthy, S., McGillion, M. H., Victor, J. C., Jones, J., & McFetridge-Durdle, J. (2016). Prodromal symptoms associated with acute coronary syndrome acute symptom presentation. *European Journal of Cardiovascular Nursing: Journal of the Working Group on Cardiovascular Nursing of the European Society of Cardiology*, 15(3), e52-9. <https://doi.org/10.1177/1474515115580910>

Review Questions

1. Are the early warning signs of heart disease related to the pain and anxiety people feel when experiencing a heart attack in the hospital?
2. Are these early warning signs related to other diseases or conditions?

Background

There are early warning signs, that can be sporadic and vague that indicate heart disease, such as chest pain, fatigue, and shortness of breath, that can occur days, or months before a cardiac event.

The early symptoms seem to be related to the symptoms people experience in the hospital for their heart attack.

How the study was done

This information comes from a larger study on heart pain and anxiety and pain management practices, which includes data from one emergency department. The participants were recruited if they had heart disease known as Acute Coronary Syndrome (ACS), reported early warning symptoms, or reported chest pain and had test results showing heart disease.

Patients were asked questions about their early warning signs before they had their heart attack. They filled out the cardiac prodromal symptoms screening scale (PS-SS) of nine common symptoms. They reported if they had the symptoms and the level of the intensity, and the frequency. A numeric scale was used to measure pain intensity (0-no pain; 1-3 mild pain, 4-6 moderate pain, 7-10 severe pain). The state-trait anxiety inventory was also used to measure anxiety at the time of admission and in general (e.g. during normal activities).



What the researchers found

It was found that of 121 patients, those with more pain while in the hospital, had experienced more early warning symptoms-prodromal symptoms- specifically headaches, sleep disturbance and anxiety. The symptoms were not related to state or trait anxiety. Both women and men experienced prodromal symptoms equally. Patients with hypertension were 7.5 times more likely to have unusual fatigue before their heart attack, which was the only early warning symptom related to other conditions.

Most patients reported having early warning symptoms such as pain, shortness of breath, anxiety, and unusual fatigue, which ranged from moderate to severe, and occurred daily or several times a week. Patients who experienced headache, sleep disturbance and anxiety reported the highest pain intensity when they came in for their heart attack.

Conclusion

The prevalence of early warning symptoms is similar in other studies, with the most common being chest pain, shortness of breath, anxiety and unusual fatigue.

During the acute phase when having a heart attack, patient's acute pain intensity was related to patients who experienced prodromal headaches, sleep disturbances and anxiety.

Patients with hypertension were 7.5 times more likely to have unusual fatigue before their heart attack, and it wasn't related to other conditions, so monitoring the early warning signs is very important.

Clinical Importance

1. Awareness and early recognition of early warning signs of developing heart disease are important for targeted individual risk factor profile and management of potential heart disease.
2. These may include fatigue, chest pain, shortness of breath and anxiety; and those that experienced headache, sleep disturbance and anxiety also experienced greater pain during hospitalization for a heart attack.