



BROKEN HEART SYNDROME

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REVIEW ARTICLE

ABSTRACT

Have you heard about broken heart? Is the broken heart being real? You might have heard that hearing about a winning lottery can freeze the body. Yes, Broken Heart Syndrome is real. It can be triggered by stressful situation and after a good shock also. It may also call Stress Cardiomyopathy, Takotsubo cardiomyopathy or Apical Ballooning Syndrome. It was first described in Japan in 1990.

Keywords : Broken Heart Syndrome, Heart attack, Takotsubo Cardiomyopathy, Apical Ballooning Syndrome

INTRODUCTION

DEFINITION: -

It is a type of non-ischemic cardiomyopathy in which there is a sudden temporary weakening of the left ventricular muscular portion of the heart.

INCIDENCE: -

✓ 90% of reported cases are in women ages 58 to 75 years.

✓ Patients are typically Asian or white. In a literature review of cases in which race was reported, 57.2% of patients were Asian, 40% were white, and 2.8% were other races.

CAUSES AND RISK FACTORS: -

- Exact cause is unknown
- It occurred due to intense physical or emotional events
- Some potential triggers are:
 - ❖ The death of a loved one
 - ❖ A frightening medical diagnosis
 - ❖ Domestic abuse
 - ❖ Losing or even winning a lot of money

- ❖ Strong arguments
- ❖ A surprise parties
- ❖ Public speaking
- ❖ Job loss or financial difficulty
- ❖ Divorce
- ❖ Physical stressors, such as an asthma attack, COVID-19 infection, a broken bone or major surgery

Sex. The condition affects women far more often than men.

A history of a neurological condition. People who have neurological disorders, such as a head injury or a seizure disorder (epilepsy) have a greater risk of broken heart syndrome.

A previous or current psychiatric disorder. People who have anxiety or depression, have a higher risk of broken heart syndrome.

CLINICAL MANIFESTATIONS:

- Symptoms may occur within minutes or not until hours after a stressful situation, and are similar to those of a heart attack.
- Angina (sudden, severe chest pain)
- Shortness of breath
- Arrhythmia (irregular beating of the heart)
- Cardiogenic shock (An inability of the heart to pump enough blood to meet the body's demands. The impact of stress hormones "stuns" the cells of the heart, causing them to malfunction. These effects usually wear off within a few days or at most weeks, and there is no lasting heart damage.)
- Fainting
- Low blood pressure
- Heart failure

DIAGNOSTIC EVALUATION: -

- History collection and physical examination
- Electrocardiogram (EKG): - to detect irregularities in heart's rhythm and structure.
- Echocardiogram: - heart is enlarged or has an abnormal shape
- Blood test: - higher amounts of substances called cardiac enzymes in the blood.
- Cardiac magnetic resonance imaging (MRI)
- Coronary angiogram
- Chest X rays

MANAGEMENT: -

- ❖ Medication like ACE inhibitors to lower blood pressure, beta blockers to slow the heart rate, diuretics to decrease excess fluid, and anti-anxiety medicines to manage stress.
- ❖ Many patients make a full recovery within a month or so. Patient need to have another echocardiogram around four to six weeks after the first symptoms to be sure that heart has recovered. Ask doctor how long will need to continue taking these medications once recovered, as most can be stopped within three months.
- ❖ long-term therapy, beta blockers (or combined alpha and beta blockers) may be continued indefinitely to help prevent recurrence by reducing the effects of adrenaline and other stress hormones.

COMPLICATIONS: -

- Failure of the heart to be able to pump enough blood to meet the body's needs
- Heart beat patterns that are much faster or slower than normal
- Damage to heart valves
- Backup of fluid in the lungs
- Low blood pressure

PROGNOSIS: -

- Most patients recover fully within two months.
- Death is rare, but heart failure occurs in about 20% of patients.
- Low risk for having a recurrence (no more than 10-percent of cases)

PREVENTION: -

- stress management, problem-solving, and relaxation techniques can be helpful in improving both psychological and physical health. Managing stress can also be lead to additional health problems.

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