

# Broken Heart Syndrome

Formally known as takotsubo cardiomyopathy (TCM), broken heart syndrome is a phenomenon that causes the sudden death of a person, typically following the sudden loss of a loved one.

Actress Debbie Reynolds and singer Johnny Cash are two celebrities who are believed to have lost their lives due to broken heart syndrome. During the COVID-19 pandemic, broken heart syndrome deaths spiked in large part due to stress caused by sudden deaths of loved ones, financial struggles, job loss, and so on. Most recently, after the horrific mass shooting at Robb Elementary School in Uvalde, Texas, broken heart syndrome made headlines once again when Joe Garcia, husband of beloved fourth grade teacher Irma Garcia, suddenly passed away in the wake of his wife's tragic death.

Despite its notable history, broken heart syndrome is still not fully understood – although it is very real.

**Chadi Nouneh, M.D., Cardiology Medical Director, OSF HealthCare**

**“We see it after natural disasters like earthquakes, volcanoes, and hurricanes. We see it after a major disaster that causes a family member death, such as a car accident. And we see it after major events, as recent as the shooting in Texas.” (:25)**

According to the American Heart Association (AHA), broken heart syndrome causes a part of the heart to temporarily enlarge and not pump well, while the rest of the heart functions normally or with even more forceful contractions. According to the National Institutes of Health (NIG), in Japanese, the “tako-tsubo” in TCM means a “fishing pot for trapping octopus” – and the left ventricle of a patient diagnosed with this condition resembles that shape.

Also known as apical ballooning syndrome, Dr. Nouneh explains that the “ballooning” of this part of the heart is when broken heart syndrome events tend to occur, as blood is unable to pump normally.

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**“The normal heart usually works at 50% to 60% ejection fraction, and suddenly goes to 20% to 25%. The base of the heart still working, but the apical of the heart stops working. Someone may get what we call ventricular arrhythmia, ventricular tachycardia, or ventricular fibrillation. The heart can stop and people can go into cardiac arrest and may die – even though the artery looks completely normal.” (:34)**

Broken heart syndrome may be misdiagnosed as a heart attack, according to the AHA, because the symptoms and test results are similar and show dramatic changes in rhythm and blood substances that are typical of a heart attack. However, when a heart attack occurs, a major blocked artery is the cause – which is not the case with broken heart syndrome.

In addition to mimicking a heart attack, Dr. Nouneh adds that someone with broken heart syndrome may also display signs of other heart-related issues. The difference is that many of these people may not have had heart issues prior to the significant event that is causing the symptoms.

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**“People can present with congestive heart failure, shortness of breath, chest pain, or cardiac arrest. I’ve also seen people present with stroke because when the heart stops working, a blood clot can form, causing a stroke.” (:18)**

While broken heart syndrome is often treatable and most people who experience it make a full recovery within weeks, the AHA warns that broken heart syndrome can lead to severe, short-term heart muscle failure leading to sudden death. Dr. Nouneh adds that anyone who experiences a tragic event or a major stressful event in their life could be at risk.

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**“In any event if the baseline is higher risk, like people who are diabetic or high blood pressure, those are the people who could have a worse outcome. But broken heart syndrome can happen anyone, any person, even without any background.” (:18)**

Because broken heart syndrome can occur suddenly, it is important to take certain steps to be on alert for it. If you know someone who has experienced a recent traumatic event, sudden death of a loved one, or any of the other markers that may lead to broken heart syndrome, knowing the previously mentioned signs to watch for is key. Dr. Nouneh adds that having a support system in place for this person is key.

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**“What we can do is just provide support and keep an eye on symptom presentation, especially in those people in need such as after a school shooting or a close death or sudden death. Just keeping that family support and social support is so important.” (:21)**

If you or a loved one has recently gone through a significant life event, establish a support person or group of people and connect them with a mental health professional if necessary to help them cope with the event. If someone is experiencing symptoms such as chest pain, shortness of breath, breathing problems, and so on, go to your nearest emergency department or call 911 immediately.