TAKO-TSUBO CARDIOMYOPATHY (BROKEN HEART SYNDROME)



This factsheet aims to provide answers to some of the frequently asked questions about Tako-tsubo cardiomyopathy. It explains how Tako-tsubo cardiomyopathy is diagnosed and looks at some of the possible causes. It also explains the management of Tako-tsubo cardiomyopathy and what to expect during the recovery process.

What is Tako-tsubo cardiomyopathy?

Also known as acute stress-induced cardiomyopathy, apical ballooning or broken heart syndrome, Tako-tsubo cardiomyopathy is a sudden, temporary weakening of your heart muscle, often as a result of intense emotional or physical stress.

What are the symptoms?

The initial symptoms of Tako-tsubo cardiomyopathy are very similar to those of a heart attack, for example chest pain, breathlessness or collapse.

If you experience chest pain or breathlessness, or you see these signs in someone else, call 999 immediately.

So, have I had a heart attack?

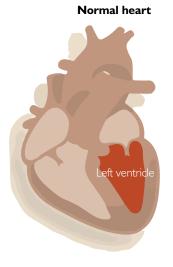
Most definitely not! Broken heart syndrome is a completely different condition.

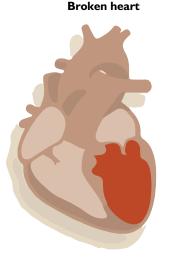
How is Tako-tsubo cardiomyopathy diagnosed?

Initially, you will have an **electrocardiogram** (ECG) – a tracing of your heart rhythm – and some blood tests. These will appear to show that you have had a heart attack.

However, when doctors examine your heart arteries (using **coronary angiography**), there will be no evidence of blockage as there would be in someone who has had a heart attack. Instead they will see that your heart muscle is not working properly, and the bottom left chamber of your heart (the left ventricle) is larger than normal. This is sometimes called 'apical ballooning'.







Apical ballooning of the left ventricle

The doctors may need to do some more tests, such as an **echocardiogram** or a **cardiac magnetic resonance scan**, to confirm the diagnosis.

How is Tako-tsubo cardiomyopathy treated?

At the current time there is no known medicine that has been shown to help in the acute phase of Tako-tsubo cardiomyopathy, or to prevent a second episode from happening.

Because a heart attack needs to be treated quickly to reduce the damage to the heart, Tako-tsubo cardiomyopathy is often treated as a heart attack at first, until the diagnosis has been confirmed.

Once the diagnosis is confirmed, doctors will keep a close eye on you in a coronary care unit, where you will have your heart monitored. This is usually for 24-48 hours as this is when complications are most likely to occur. You may be given medicines to help your heart muscle recover or supportive treatments, such as fluid removal to help with breathlessness or mechanical devices to help your heart to pump better.

What causes Tako-tsubo cardiomyopathy?

Doctors currently believe that this is an interaction between how our brains take in emotions or traumatic events (including illness) and an intense reaction of "shock" from the heart muscle. The amount of time between the stress trigger and the Tako-tsubo episode can vary from seconds to weeks or even months.

It is not known exactly what causes this strong interaction. Currently, the most widely accepted theory is that when a stressful event happens, the body releases excessive amounts of adrenaline and adrenaline-like hormones, which 'stun' the heart.

The poetic stories of the "broken hearted" are therefore far more real than we were ever inclined to believe!

Will it happen again?

About 2 or 3 out of every 30 people who have had a Tako-tsubo episode (10-15%) will have another episode. In those who do have further episodes, the trigger can be completely different each time.

Is there anything I can do to stop it happening again?

At the current time we cannot tell who is more likely to experience a second or third episode. There are no known measures that can prevent another episode.

What is the outlook?

Most people follow a natural process of recovery after an episode of Tako-tsubo cardiomyopathy. The heart muscle function will usually improve, although some people find that symptoms such as tiredness or chest pain continue for much longer. The long-term outlook is still being researched.

The highest risk of complications, including heart failure and death, is during the early stages, which is why people are carefully monitored.

Is Tako-tsubo cardiomyopathy inherited?

Current knowledge is too limited to be able to answer this. More research is needed to find out.

Has my heart been weakened by this episode?

After the acute episode your heart will naturally recover its pumping function. However, this occurs at a different rates in different poeple. Doctors are currently researching the level and speed of recovery in those who have had an acute episode.



Where can I get more information about Tako-tsubo cardiomyopathy?

More information is available from:

- Cardiomyopathy UK (www.cardiomyopathy.org)
- University of University of Aberdeen Cardiovascular Research team Contact:

Cardiovascular Medicine Research Facility Level I, Yellow Zone, Aberdeen Royal Infirmary Foresterhill, Aberdeen AB25 2ZN

Tel: 01224 559573

 Tako-tsubo support group https://www.facebook.com/groups/TakotsuboSupport/

Explanation of medical terms

Cardiac magnetic resonance scan: uses a strong magnetic field and radio waves to create detailed images of the structure of your heart.

Cardiomyopathy: a general term for disease of the heart muscle, where the walls of the heart chambers have become stretched, thickened or stiff.

Coronary angiography: an invasive procedure that involves taking x-rays of the heart's arteries. The resulting images are called coronary angiograms.

Echocardiogram: an ultrasound scan of the heart. Sounds waves are used to create an image of the heart and surrounding blood vessels.

Electrocardiogram (ECG): records the rhythm and electrical activity of your heart.

If you would like to speak to one of our nurses in confidence, please call the Chest Heart & Stroke Scotland Advice Line Nurses