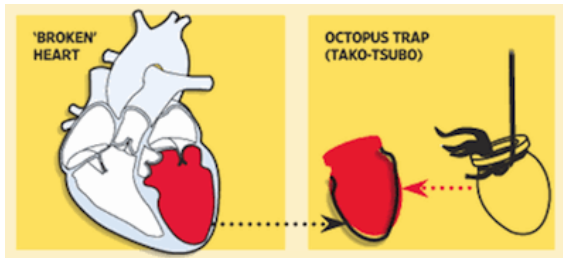


## What is Takotsubo?



Takotsubo gets its name from the shape of the enlarged left ventricle of the heart which can sometimes be seen. This is similar in shape to the Takotsubo jar, a Japanese octopus trap. Takotsubo is thought to be a brain disease with the heart being the target organ and is also thought to be associated with changing oestrogen levels.

In cases where the characteristic Takotsubo shape is present, the left heart chamber (the ventricle), becomes significantly enlarged and does not pump very well which can cause it to weaken. The weakened heart muscle is then not able to function properly and fails to provide the required blood pressure and as a consequence blood flow to the organs of the body may no longer be sufficient.

Takotsubo presents acutely, so it is often first seen in the Emergency Department. It is difficult to differentiate from an acute MI (heart attack), so an angiogram is needed to make the diagnosis. Not all patients with Takotsubo will have the characteristic apical ballooning however, as there are several other types of Takotsubo which are usually less severe and are less prone to complications. Many patients do recover well from Takotsubo within days or weeks, but one in 20 may die. Patients may also experience long term complications. Takotsubo can also happen more than once, but this is quite rare.

Over 90% of Takotsubo patients are women around menopause or after, while men are rarely affected they tend to have a worse outcome.

## Symptoms of Takotsubo

There are lots of symptoms you might have with Takotsubo as it presents very similar to a heart attack. Below are just a few of these. Sometimes other less common symptoms may also be experienced.



Severe chest pain, heavy pressure, squeezing or tightness



Shortness of breath, feeling nauseous



Feeling suddenly dizzy, lightheaded or feeling extreme fatigue

Severe chest pain or discomfort can occur, with a heavy pressure, squeezing or a tight feeling in the chest, sometimes spreading to the arms, neck, jaw, back or stomach. Shortness of breath, feeling nauseous, sweaty or feeling light-headed are also some of the symptoms you might experience. Extreme fatigue may also be a symptom and raised Troponin can also occur. Some with more severe forms may lose consciousness or even die suddenly.

## Triggers

Here are just some of the things that might start or trigger Takotsubo – commonly, these are physical or psychological in nature

An Asthma attack or any condition resulting in severe breathlessness. Extreme pain, a brain bleed or a brain injury. Extreme stress and sudden extreme shock. Sometimes the trigger is simply not known.

It is also possible for ‘positive’ emotional events to trigger a Takotsubo such as a surprise party or receiving an unexpected sum of money. Research has also found that people who live with epilepsy, or neurological or psychiatric conditions can also have a higher risk of experiencing a Takotsubo event.

**If you have chest pain that is new to you, or that concerns you in any way, you should always seek immediate medical help.**

## Path to Diagnosis



Whilst trying to discover the cause of your symptoms, you might be given an ECG (Electrocardiogram) and blood tests to work out if you have raised Troponins (a type of protein) in your blood indicating damage to the heart muscle and NT-proBNP, a biomarker of impaired pump function of the heart. A second follow up Troponin test is usually taken around 6 hours later (though the timings can vary depending on which Troponin test you have) and the results of the 2 tests are compared to see if there have been any changes.

There are a number of tests you may undertake on your journey to diagnosis of Takotsubo and these may include some or all of the following.

- Echocardiogram



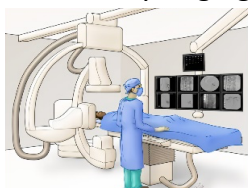
- This test uses ultrasound to look at the structure of your heart and how it is functioning.

- Cardiac MRI (Magnetic Resonance Imaging) or PET (Positron Emission Tomography) Scan.



- Both these scans are non-invasive and look at the structure and function of the heart. Especially if the echocardiogram did not give clear results; however, cardiac MRI is commonly not available in the emergency room and rarely used in this context.

- Coronary Angiogram

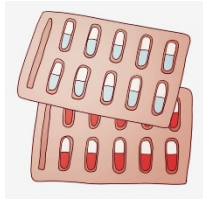


- This test is primarily done to see if you have blockages or narrowing in the blood vessels of your heart, as this may indicate why you are experiencing angina symptoms. Typically, patients with Takotsubo have non-obstructed coronary arteries.

### How is Takotsubo Treated?



As Takotsubo presents in a very similar way to a heart attack, most people will, at least initially, receive the same treatment as a heart attack patient, for example with a coronary angiogram to rule out blocked or narrowed arteries and to additionally try to identify any characteristic Takotsubo shaping.



Once Takotsubo has been diagnosed, medications such as ACE (Angiotensin Converting Enzyme) inhibitors might be used to reduce the workload of the heart. Diuretics may also be given as breathlessness may be due to fluid buildup around the lungs because of the heart not working properly. If irregular heartbeats (arrythmias) are an issue, then it is possible that these may be treated by an ICD (Implantable Cardioverter Defibrillator) which will monitor your heartbeat and give a small electrical shock if the beats become too irregular.



Lifestyle changes in order to reduce stress hormone levels can also help. Ensuring you get sufficient sleep and reducing stress levels wherever possible - perhaps by the practice of yoga, meditation or Tai Chi (to name but a few), might also be beneficial to overall health and wellbeing too.

## STRESS MANAGEMENT IN YOUR LIFE

**MEDITATION**

**DEEP BREATHS**

**EXERCISE**

**GET MOVING**

**TIME IN NATURE**

**RELAXATION**

**SLEEP WELL**

**RECHARGE**

**CONNECT SOCIALLY**

**JOIN A CLUB**

**EAT WELL**

**REDUCE CAFFEINE**

**MAKE LISTS**

**PRIORITIZE TASKS**

N.B. Nothing in these summary sheets should be considered in any way as advice or recommendation. All information contained in these sheets is an opinion only and is shared here only in the hope that is it of interest to other patients and medical professionals. Always consult your own medical practitioner before trying any new medications or therapies and before changing any of your current routines