

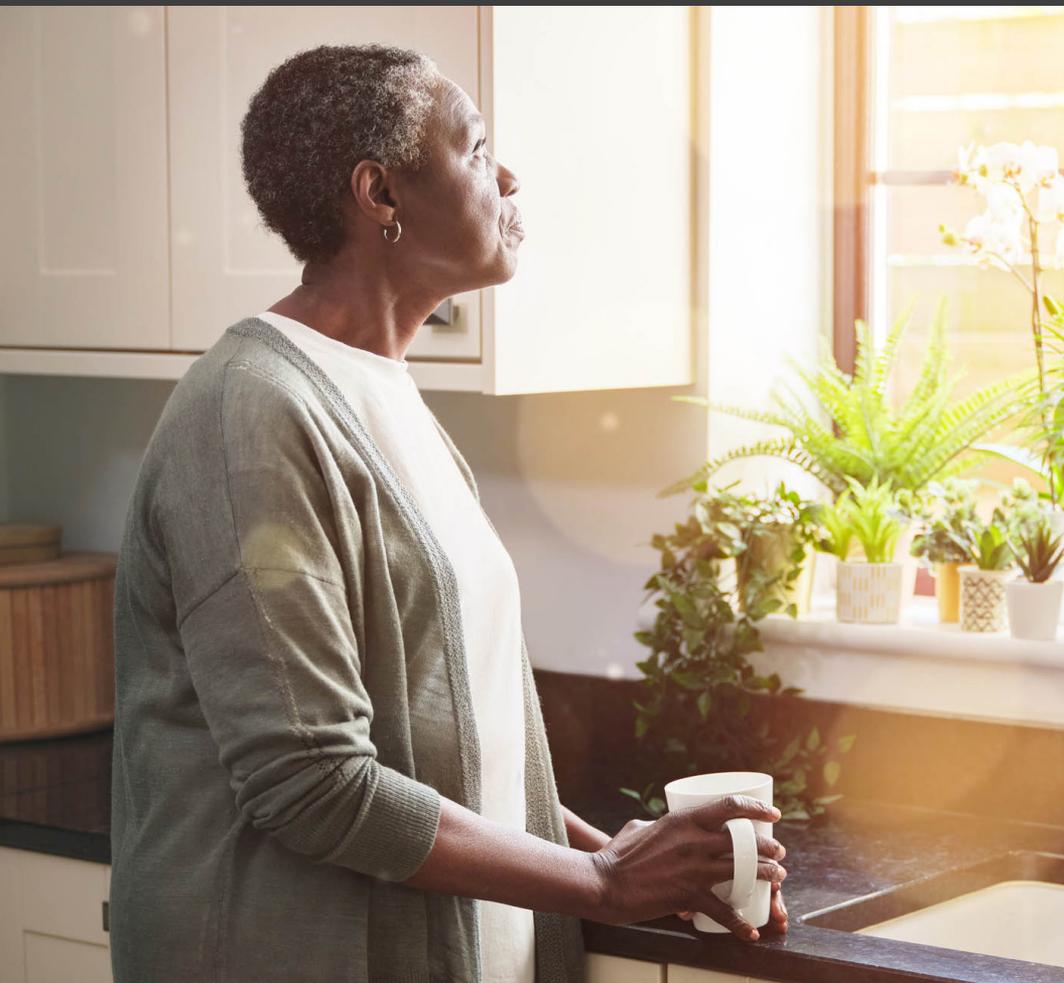


UNIVERSITY OF OTTAWA
HEART INSTITUTE

INSTITUT DE CARDIOLOGIE
DE L'UNIVERSITÉ D'OTTAWA

TAKOTSUBO CARDIOMYOPATHY

INFORMATION FOR PATIENTS, FAMILIES AND CAREGIVERS



What is cardiomyopathy?

Cardiomyopathy is a general term meaning there is something wrong with the heart (cardio) muscle (myopathy). When the cause is known, another term may be added – for example, viral cardiomyopathy (heart muscle damage from a virus) or hypertensive cardiomyopathy (damage from high blood pressure or hypertension).

What is takotsubo cardiomyopathy?

Takotsubo cardiomyopathy (takotsubo) is a sudden weakness of the left ventricle (the heart's main pumping chamber). It is most often caused by severe emotional or physical distress. This condition can also be called “stress-induced cardiomyopathy” or “broken heart syndrome.”

The information in this booklet answers common questions about takotsubo. If you have any additional questions or concerns, please speak with a member of your health care team.

What are the symptoms of takotsubo?

Common symptoms include:

- Chest heaviness
- Chest pain
- Breathlessness

Other symptoms can include:

- Palpitations (heart racing)
- Nausea
- Vomiting
- Dizziness

In older patients, symptoms can be vague and hard to detect. These patients often experience symptoms such as feeling exhausted and generally unwell. These symptoms usually occur over the course of a few days.

What tests are completed?

There are several tests used to diagnose takotsubo. Some are more invasive than others and may require you to not eat or drink prior to the test. Your health care team will talk to you about the tests that are appropriate for you, and about the risks and benefits of each. Your health care team will also address questions or concerns you have about the testing. The following tests may be required:

- Blood tests
- Electrocardiogram (ECG)
- Angiogram (cardiac catheterization)
- Echocardiogram (ECHO)
- Cardiac magnetic resonance imaging (MRI)
- Positron emission tomography (PET) scan

Who is at risk of developing takotsubo cardiomyopathy?

Takotsubo is a condition related to extreme emotions, not just negative ones. There is recent evidence of patients also developing takotsubo because of positive life events like weddings.

Did I have a heart attack?

No, takotsubo is not a heart attack.

The symptoms of takotsubo can mimic those of a heart attack. Takotsubo is different from a heart attack because there is no blockage in the coronary arteries. Many of the same diagnostic tests are used to diagnose the two conditions. However, the test results will be different for takotsubo.

Rarely, a patient can come into hospital with a heart attack due to a blockage of a coronary artery and then go on to develop takotsubo due to the emotional stress associated with being in the hospital.

Was my heart damaged?

Heart function is measured by the amount of blood leaving the heart each time it beats, which is called the ejection fraction (EF). A typical EF is between 50 to 70%. Almost everyone with takotsubo has a lowered EF when they first arrive at the hospital. This is because the left ventricle is weakened. By the time the patient is ready to be discharged, the EF is usually starting to improve, and typically it continues to improve over time. Unlike a heart attack, which can leave a permanent scar, takotsubo does not usually result in permanent damage. This can be confirmed by follow-up cardiac MRI testing. In some cases, there is residual weakness of the heart muscle, which requires continuing care. This will be followed up with your health care team after discharge.

Do I need a stent in one of my arteries?

No, not if you were just diagnosed with takotsubo.

Stents are required when there is narrowing of the heart arteries. In 99% of cases of takotsubo, there is no need for stenting because there is usually no significant narrowing in the heart arteries with this condition.

Are there complications?

For many people, the symptoms of takotsubo begin to decrease soon after diagnosis and arriving at the hospital. Some people may develop a faster heartbeat or have fluid backing up in the lungs, needing further treatment. A small number of patients need to have their blood pressure supported with intravenous medicines for a few days until their heart recovers. Generally, the longer after you have been diagnosed and treated in hospital, the less likely you are to experience complications.

There is a tiny risk of cardiac arrest (when the heart stops completely) in the first 48 to 72 hours after onset of takotsubo symptoms. For that reason, we will monitor your heartbeat with ECGs and sometimes a wearable monitoring system (telemetry) while you are in the hospital. The risk of dying for patients diagnosed with takotsubo is rare. It is less than 4%.

How long is recovery?

Patients will usually begin to feel better after the acute phase of the condition has passed (usually after a few days). Within the first week, the ECGs and echocardiograms will typically show some improvement in heart strength. Most people do not feel like they have fully returned to what is typical for them for a few weeks to a couple months.

What medication will I need to take and for how long?

There is no medication designed specifically for takotsubo.

Your health care team will discuss the best medication for you. You will likely remain on these medications for three to six months. It is important not to change or stop any of your medication unless you speak with your health care team.

A small number of people may develop a blood clot in the heart. If this happens, your doctor may decide to also put you on a blood thinner medication for a few months until the blood clot dissolves.

Heart medications may have noticeable side effects. For example, beta blockers may cause fatigue or dizziness, and ACE inhibitors may cause a dry cough. If you find the side effects of the medication prescribed to you are difficult to tolerate, you should talk to your doctor.

Who will follow me after I leave the hospital?

After you are discharged, you will be followed by a heart specialist, either through the Takotsubo Recovery Clinic at the University of Ottawa Heart Institute (UOHI) or by your existing cardiologist. A referral to the UOHI Takotsubo Clinic will be made by your health care team if needed. Most patients are followed for at least one year after discharge from the hospital, and some may be followed for longer.

All our patients are referred to our Cardiac Rehabilitation Program. There are programs set up around the region, so you don't necessarily need to come back to the Heart Institute to participate. Please call 613-696-7068 for more information or to book your first appointment. This appointment should be scheduled about eight weeks after you are discharged.



If you have any questions or concerns after your discharge, you can call the nursing coordinator at 613-696-7000 and then press zero. There is a nurse available 24 hours a day, seven days a week. The nurse will return your call as soon as they are able (within the same day you called).

Follow-up testing

Follow-up testing is completed at the discretion of your health care team. If you come to the Takotsubo Recovery Clinic, you will likely repeat both the PET and cardiac MRI scans three to four months after discharge from the hospital. If both follow-up tests are clean, your heart has fully recovered. At this point your cardiologist will adjust or discontinue the medication you started in the hospital.

We take pride in research at the UOHI. If there is a research opportunity related to takotsubo, and if you are interested, then one of the research nurses may visit you to discuss this during your admission.

Do I need to change my lifestyle?

Approximately 95% of patients have a single episode of takotsubo that is never repeated. However, 5% of patients may have one or more recurrent episodes in subsequent years. There is no reliable way to predict who is at greatest risk of recurrence. Incorporating heart-healthy habits is of benefit to all individuals with heart conditions. Eating well, exercising regularly and managing stress in your life can help support your heart while you recover from takotsubo. These habits can also keep your heart healthy over the long term.

We recommend you cook at home more often, eat regular meals, enjoy a variety of vegetables and fruit, choose whole grains, and use plant-based fats (that is, olive or canola oil) in your cooking more often. You can check out the Top 10 Tips for Healthy Eating and the Nutrition 101 videos on the UOHI's website to learn more.

A brisk walk of 20 to 30 minutes each day is excellent exercise and can be done in all weather (even in the mall if necessary). It is important to remember to listen to your body after a cardiac event. Starting a walking program with shorter time and distances and gradually increasing your activity each day is recommended. Make sure you rest when needed.

As severe psychological and emotional stress are two of the most common causes of takotsubo, managing your stress is crucial to your recovery. The Cardiac Rehabilitation Program offers a stress management class to learn new skills. The Managing Emotions Program is a treatment program for patients who experience symptoms of anxiety or depression. Other patients manage well on their own. If stress is a trigger, some patients and caregivers find meditation, yoga, and tai chi to be beneficial. Please review the Top 10 Tips for Emotional Health and the educational videos for mental health on our website to learn more.

Additional resources

Physical activity

ottawaheart.ca/physical-activity-heart-health

Nutrition

ottawaheart.ca/healthy-eating

Mental health

Read the sections about stress, anxiety and depression, and find additional mental health resources in the Heart Institute's Heart-Healthy Living Guide. ottawaheart.ca/document/heart-healthy-living-guide.

Cardiac rehabilitation – Top 10 Tips series

ottawaheart.ca/rehab-top-10-tips

Smoking Cessation Program

ottawaheart.ca/quit-smoking-program

Women@Heart Program

cwhhc.ottawaheart.ca/womenheart-program



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