

Knowing that one of the valves in your heart isn't working well can be worrying. You probably have lots of questions. You are not alone.

The good news is that if you have a leaky tricuspid valve (known medically as tricuspid regurgitation), there are more treatment options than ever before. Until recently, taking a diuretic or water pill was one of the only treatments to help relieve the life-limiting swelling, tiredness and shortness of breath that often come with having this condition. Over time, the leaky valve will often get worse, and more medications will be needed. Open-heart surgery is an option for some (for example, if the valve is infected or if surgery is already being done to fix the mitral valve or blocked arteries). There also are less invasive procedures to repair or replace the valve, which have been shown, in studies, to help make people feel better.

If you have tricuspid regurgitation, learning about the condition and possible treatments is important. Talk with your doctor about:

1. Your valve, why it is leaky and what treatment options are available, including the possible benefits and harms of each option.
2. What's most important to you when it comes to choosing among treatments for tricuspid regurgitation - think about your preferences, goals and wishes for your care. Explain what it's like to live with a leaky valve on a daily basis. For example, does it make it hard to do certain things?



Sharing your goals and preferences can help ensure you make treatment decisions that are right for you.

This handout can help guide these discussions. You'll also learn more about tricuspid regurgitation and how it can be treated. This information, along with input from your heart valve team and your doctor, can help you play a more active role in making treatment decisions that you feel good about.

What is the tricuspid valve?

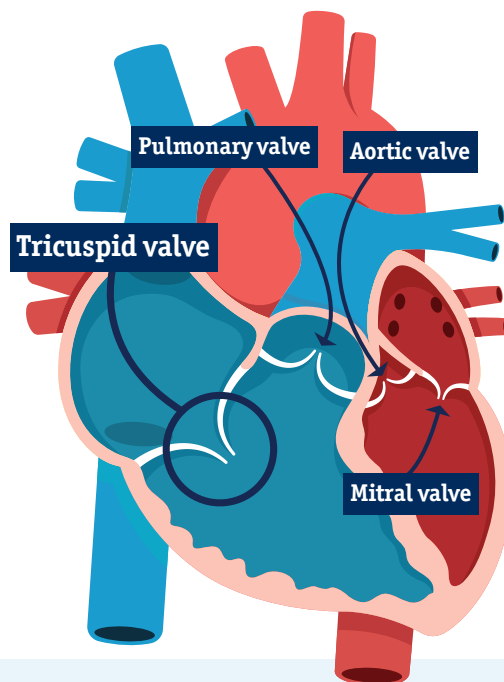
The **tricuspid (pronounced try-CUSS-pid) valve** is one of four valves in the heart. It is located between the two right chambers of the heart (the right side of the heart), called the right atrium and the right ventricle. The tricuspid valve opens when your heart relaxes and closes when it contracts to keep blood moving forward into the lungs.

What is tricuspid regurgitation?

Tricuspid regurgitation often occurs because the heart and valve have been stretched. As a result, the leaflets of the tricuspid valve, which are like flaps, aren't able to close tightly enough when the heart contracts. If this happens, blood can seep backward (into the right atrium) with each heartbeat, making it much harder for your heart to do its job and move the blood forward into the lungs.

Less often, the valve doesn't work well because it has been damaged by an infection or an earlier procedure (for example, having a pacemaker put in).

A leaky tricuspid valve often gets worse over time. It can also lead to serious health problems, especially if it isn't treated. You will have frequent echocardiograms and follow-up visits to see how your condition is progressing. Seeing a doctor with special training in treating heart valve problems is important.



Your heart has four rooms or chambers. In between each is a valve. These valves act like doorways between the rooms to help keep the blood moving in the correct (one-way) direction. When a valve isn't working properly, blood doesn't move as it should into and out of the heart.

MILD

- Small amount of leakage
- You may not feel any differently

MODERATE

This is when symptoms are likely to limit your day-to-day life and medications may no longer be enough. Talk about treatment options so you know what choices you have now and in the future.

- Greater amount of blood flow leaking back
- Your heart works harder, less oxygen-rich blood gets to the body
- You may feel very tired, have swelling of your ankles or feet, and feel short of breath after a little activity (for example, going shopping, visiting a friend, getting the mail)

SEVERE

Sometimes the valve can get better with treatment. How you and your health care team decide the best path to manage your tricuspid valve disease will depend on a few things, including:

- How leaky your valve is.
- How bad you are feeling/How the condition affects your daily life and what you can and can't do.
- Whether or not you want or are able to undergo a procedure to fix or replace the valve.

What a leaky valve might feel like

Tricuspid regurgitation makes it hard for the heart to do its job and pump blood in the right direction. Because of this, it also makes it more difficult to do the things you want to do.

You may notice:



Feeling unusually tired and worn out



Having a hard time being active or exerting yourself



Swelling in your belly (called ascites), legs or feet (called edema)



Being short of breath, especially with activity



Pulsing feeling in the neck



Your heart flip-flopping or skipping a beat

People with a leaky tricuspid valve may not know their symptoms are caused by the condition. Some may even pass them off as a natural part of getting older or slowing down. **Make sure to report how you are feeling and when you notice symptoms getting worse.**

It's important to know:

- If untreated, these symptoms usually get worse over time.
- They could also be due to other heart conditions, such as high blood pressure, atrial fibrillation (AFib), aortic or mitral valve disease, and heart failure, which are common in people with tricuspid regurgitation. These heart conditions should be closely monitored and treated as this can actually make the leaky valve get better!

Your goals for managing tricuspid regurgitation

Think about and talk openly with your health care team about your concerns, goals and values. Knowing what is important to you can help you and your care team make treatment decisions that are in line with what matters most to you.



What symptoms bother you most or disrupt your usual activities?

**When it comes to treating your leaky valve, what is most important to you?
What are your goals for treating it?**

What does it mean to “feel better” from your leaky valve?

Options for treatment

Several factors may affect how the valve should be treated, including:

- How leaky the valve is
- The valve's structure or shape
- Other heart conditions (for example, heart failure, blocked arteries that reduce blood flow to the heart, mitral valve disease)
- Your age and general health
- Your preferences

Your doctor will share more information about your valve and how it informs and shapes which treatment might be best. Your health care team will also want to know what your preferences are for continuing with medications and monitoring instead of fixing the valve.

Options may include:

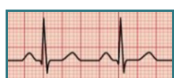
Medications and close monitoring, including of heart rhythm problems, which are common



Diuretics (also called water pills)

They:

- Help the body get rid of excess fluid and reduce swelling (edema) in the belly, ankles or legs.
- Ease shortness of breath.
- Require monitoring of kidney function and electrolytes.



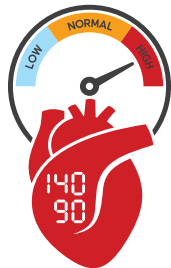
Atrial
Fibrillation



Normal ECG

Heart Rhythm Treatment

Normal heart rhythm may reduce the tricuspid regurgitation and improve symptoms.



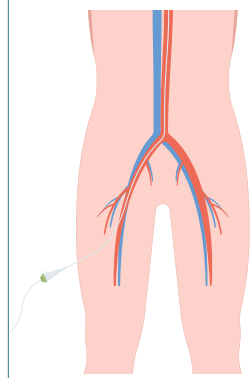
Management of other heart diseases

Treatment of other heart conditions like high blood pressure, left heart valve disease and lung disease may also reduce tricuspid regurgitation.

If medications are not enough as is the case with severe tricuspid regurgitation, there are two ways to reach the tricuspid valve to be able to fix it:

- 1) going through a vein in the leg or groin (minimally invasive procedure) or
- 2) with open-heart surgery.

A procedure to repair or replace the valve without opening the chest (known as minimally invasive or transcatheter procedures)



- This may be a better option for people who might have a difficult time recovering from major surgery or who are likely to have complications.
- These procedures are done using a small, flexible tube called a catheter; the tube is carefully threaded to the heart through a vein in the groin.
- There are two ways to repair or fix the valve:
 - One helps pull the leaflets closer together using a clip or clasp (valve repair).
 - The other involves placing a new valve inside the leaky valve (valve replacement).
- In studies, these procedures have been shown to help:
 - ✓ Lessen how leaky the valve is without the need to undergo surgery.
 - ✓ Improve quality of life and what people are able to do compared with those who only receive medications.

Open-heart surgery, in some cases



Most patients with tricuspid regurgitation will choose between medical therapy (diuretics and monitoring) and a minimally invasive procedure to fix the valve. For some patients, open-heart surgery will be offered as an option. This involves opening the chest to be able to access the heart directly.

This may be an option if:

- Less invasive options are not safe - for example, when the valve is infected (endocarditis).
- You are already having surgery to fix other health problems - for example, a leaky mitral valve or blocked artery.

Not everyone is able to have this type of surgery because it may be too risky - that means that the surgery could do more harm than good. The recovery time is also longer.

Weighing your options and what's right for you

Use the space in this chart to write down information your health care team shares, as well as your thoughts. Doing so can help you understand treatment(s), what you might expect from each and compare your treatment options.

Option	Continuing with medications and monitoring	A procedure to repair or replace the valve (whether it is using a clip or clasp or placing a new valve inside the leaky valve or, less often, with open-heart surgery)	
Is this an option? Talk with your care team about which treatment is right for you and how it might help you.			
Possible harms (risk of infection, death)			
Possible benefits (being able to do more, walk farther, feel less tired, perhaps take fewer medicines)			
Other things to think about (for example, after care, transportation after, taking a blood thinner)			

Every person is different. The decision of how to fix your valve is an important one that is made with your doctor. Be sure to share your wishes.

What might make certain treatments hard

Sometimes it isn't easy to follow through with your treatment plan. Think about and write down what might make it difficult for you so your care team knows and can point you to resources that might help. Some of these may play a role in your decision. For example:



Explain briefly

	Being a burden on family	
	Cost	
	Health insurance issues	
	Transportation or getting to and from appointments	
	Not really understanding the condition and/or different treatments being offered	
	Taking time off work	
	Being scared of being in the hospital	
	Being worried something might go wrong with a surgery or procedure	
	Other:	

What decision feels right to you?

The decision of whether or not to have your valve repaired or replaced is a personal one.

It is important to:

- Talk about the possible benefits and harms of each treatment option, as well as your own feelings about having a procedure.
- Understand the reasons why fixing your valve is being recommended.

It's OK to take some time to think about your treatment options and ask more questions.



What other information do you need to make a decision that you feel good about?

Based on our discussions, together, we decided:

- I will have my valve ____ repaired ____ replaced.
- I need more time to think about it and ask questions. We plan to talk about it again in _____ (weeks/months).
- As of now, I don't want to have a surgery/procedure.
- I will continue taking my medications and keep an eye on symptoms/how I'm feeling.

Notes:

Updated: November 2024 | Funded by: American College of Cardiology | Authors: Amanda Crowe, MA, MPH; Rebecca T. Hahn, MD, FACC; Katherine Doermann Byrd; Maurice Alston, DO, FACC; Katie Bates, ARNP, DNP, FNP; Marie-France Poulin, MD, FACC; Megan Coylewright, MD, MPH, FACC. Conflicts of Interest: All developers - none. The material provided on this guide is intended for informational purposes only and is not provided as medical advice. Any individual should consult with their own physician before determining their treatment options for tricuspid regurgitation. For more information, visit [CardioSmart.org/TricuspidValve](https://www.CardioSmart.org/TricuspidValve). | Copyright © 2024, American College of Cardiology Foundation.

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