

I Have

Mitral Regurgitation

Now What?

Finding out that you have a problem with one of your heart's valves can be worrying.

To help, the American College of Cardiology has developed a series of tools that reflect common questions and concerns shared by people living with varying degrees of mitral regurgitation.

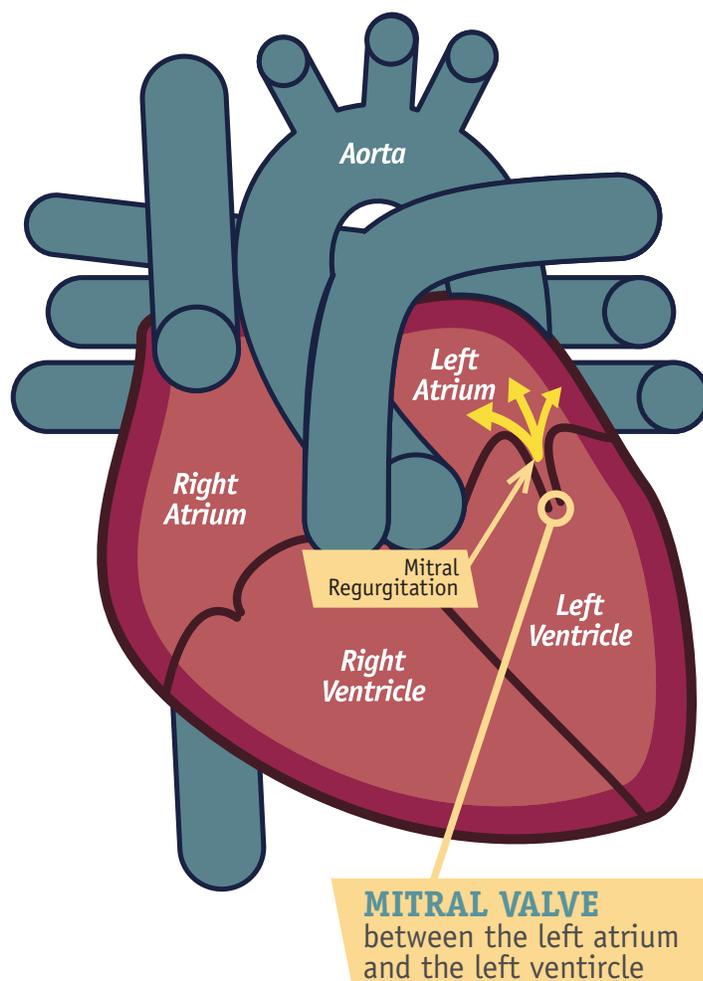
I Have Mitral Regurgitation, Now What?

I Have Mitral Regurgitation, Now What? is designed to help you understand mitral regurgitation (MR), how it may worsen over time and better know what to expect. There are also two related worksheets — *About My Mitral Regurgitation* and *My Mitral Regurgitation Tracker* — that you can download and print. These resources allow you to easily record important information about your heart disease, symptoms and important health numbers. Doing so will help you and your heart team work together to manage your condition.

What is mitral regurgitation?

MR happens when one of the valves in the heart – called the mitral valve – doesn't close properly. Instead, the valve leaks, allowing some blood to flow back into the heart. When this happens, your body may not get the oxygen it needs.

Some people are born with a problem in the mitral valve. For many others, it can develop because of wear and tear or damage from a heart attack or heart surgery.



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Now What?

MILD

MODERATE

SEVERE

How and when will my MR get worse?

MR can be **mild, moderate or severe** – or anywhere in between.

It is helpful to know how MR progresses over time so that you know better what to expect. Keep in mind, many factors can affect its severity; for example, having high blood pressure or how well your MR is being treated.

If you have moderate to severe MR, there are certain measures that your heart team may use to help decide if and when you may need to have your mitral valve repaired or replaced.

Ultrasounds of your heart (echocardiograms or echo) will be used to check for any:

- ▶ Enlargement of the heart
- ▶ Weakening of heart function
- ▶ Evidence of abnormal pressures within the heart

Your doctor will also look for any irregular heart rhythms and specifically atrial fibrillation that may be noted on EKG.

Mild

- Periodic check ups
- Follow-up echocardiogram at regular intervals
- Stress tests and/or a transesophageal echocardiogram (TEE) may be recommended
- Medications
 - Beta-blockers
 - ACE inhibitors-ARBs
 - Aldosterone antagonists if EF <35%
 - Vasodilators (for people who can't take an ACE-I or ARB)

Moderate to severe

- Refer to a valve specialist
- Close monitoring; how often you see your health team and have a repeat echo will depend whether your symptoms worsen
- More intense medication therapy
- Echo every 1 to 2 years if no change in symptoms or your heart's structure or anatomy
- Additional testing to determine if valve repair or replacement is needed and which procedure is more appropriate, or to find out if you have narrowed or blocked arteries
- Minimally invasive procedure or surgery to repair or replace the valve

What happens next?

How your leaky valve will be monitored and treated will depend on several factors. These include, but may not be limited to:

- ▶ how you are feeling
- ▶ the reason your mitral valve is leaky
- ▶ what is seen on your echocardiogram and other tests
- ▶ what is important to you in terms of activity
- ▶ your risk of having a major surgery (when replacement is needed)
- ▶ other medical conditions and your risk of heart disease; many people with MR have other health issues that also need to be factored into your treatment plan

In some cases, your doctor may decide to watch your condition. In other cases, it may be more urgent for you to have your valve repaired or replaced. In some cases, if your risks of surgery are too high for a repair or replacement, other options may be available.

Watchful waiting	Repair or replacement
<p>Your doctor may explain that he/she wants to wait and watch your MR before repair or replacement of the valve is needed. This likely entails:</p> <ul style="list-style-type: none"> ▶ Routine follow up visits ▶ Your report of symptoms ▶ Repeat echocardiograms to show heart function (every 3 to 5 years if no changes in symptoms) ▶ A stress test or transesophageal echocardiogram (TEE) to look more closely at the heart and confirm things are getting worse ▶ Adjusting medications 	<p>If your valve is severely leaking or badly diseased, you will be referred to a valve team for closer monitoring and/or to have your valve repaired or replaced through a procedure or surgery.</p> <p>You will likely have more frequent echocardiograms and other tests. Medications may be added or the dosage may need to be increased.</p> <p>Mitral valve repair involves reshaping or fixing certain parts of the valve such as the leaflets and or other structures.</p> <p>Valve replacement uses a new mechanical or biological (made from animal tissue) valve. In some cases, this can be done using small incisions instead of the long incision of open heart surgery.</p> <p>If a metal valve is chosen, your doctor will talk with you about taking Coumadin to prevent blood clots from forming.</p>

How will I know my MR is getting worse? What do I need to look for?

Talk with your heart team at each visit about any new or worsening symptoms. You should contact them sooner if your energy or activity level drops or if you begin to feel unwell or have other symptoms. Do not assume that these changes are due just to “getting older.” How you feel can help guide treatment decisions.

Have you noticed:

- Feeling out of breath upon exertion, at night or when lying down
- Changes in your appetite, especially feeling full quickly
- Any unusual tiredness
- Palpitations (your heart skipping a beat or fluttering)
- Dizziness
- Other signs of heart failure (rapid weight gain, swelling in your ankles or feet, dry cough, etc.)
- Chest pain

A leaky valve may also affect your quality of life. For example, you may have difficulty exercising or being as active as you used to — even walking short distances or doing certain tasks such as going to the grocery store may seem hard. Sometimes people who are with you may notice that you need to rest more or that you are doing less than you used to.

You may not have noticed any symptoms. If that’s the case, make sure to ask yourself if you have had more difficulty doing certain tasks, including exercising or being active.

To help get a more complete picture of your health, your heart team may ask you to record your:

- Daily weight (try to measure yourself at the same time of day using the same scale)
- Blood pressure (ask your health care provider which home blood pressure monitor is best)
- Pulse/heart rate (find your pulse on your wrist; count the number of beats for 60 seconds or, if you prefer, for 20 seconds and then multiply by three)
- Medications, any problems you have taking them as prescribed, side effects, cost, etc.
- Comfort with routine daily activities, such as bathing and dressing



Regular check ups are essential — even if you are feeling good. Never skip a scheduled follow up with your health care provider. Although you may not notice a change in how you feel or what you can do, your echocardiogram or other tests may tell a different story.

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When I have an echo, what is my doctor looking for?

An echocardiogram can give your doctor a lot of information about your heart. He or she will look at specific measures to assess how your leaky valve is progressing and how it is affecting your heart. For example:

- ▶ How well your heart is pumping blood to the rest of your body (ejection fraction)
- ▶ If your heart has started to stretch or get bigger (left ventricular systolic diameter) and
- ▶ If the pressures in the arteries of your lungs are affected (pulmonary artery systolic pressure)

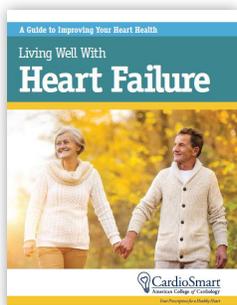
When these changes occur, your doctor may refer you to a heart valve center even if you are not having any symptoms.



Ejection fraction (EF) is something you have probably heard your care team talk about. Your EF is one way to measure how the heart functions. It tells you how much blood is pumped out of the heart with each contraction.

Pumping ability of the heart	Percent of blood in the ventricle that is pushed out of the heart with each beat
Normal	≥65%
Reduced	36-49%
Very low pumping, raising risk of serious problems	≤35%

Talk with your heart team about your EF and what your other numbers mean. You can use the American College of Cardiology's *About My Mitral Regurgitation* worksheet to record your EF and other results from your echocardiograms.



Many people with mitral regurgitation have some degree of heart failure. CardioSmart's *Patient Resource Guide: Living Well with Heart Failure* offers an easy-to-use workbook to track important health information over time. It's also something that can be easily shared with your health care provider.

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Additional questions to ask

Below are some questions you might wish to ask your heart team:

- ▶ What caused my MR?
- ▶ Has my MR progressed?
- ▶ What's the difference between repair and replacement?
- ▶ How do we decide which treatment is best (medical therapy, repair or replacement)?
- ▶ Are there any other options if I am too high risk for major surgery?
- ▶ Are there any activities I should be avoiding?
- ▶ Is there anything I can do to keep my MR from getting worse?
- ▶ What can I do to stay as healthy as I can?
- ▶ At what point should I be seeing a valve specialist?
- ▶ How often should I come in for follow up visits?



While this resource describes how MR typically progresses and what you might expect, remember that every case is different. Some people will be watched for a long time before a repair or replacement is needed. For others, these procedures happen sooner because their condition quickly worsens. Be sure to talk openly with your health care team.



Helpful Resources

CardioSmart.org has a wealth of information and tools to help you in managing your condition. Be sure to check out our:

Patient Resource Guide:
Living Well with Heart Failure Workbook

Med Reminder App:
CardioSmart.org/Tools/Med-Reminder



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