

ESC Clinical Practice Guidelines for the

Management of

Myocarditis and

Pericarditis:

What Patients

Need to Know



## What are Clinical Practice Guidelines?

Clinical Practice Guidelines offer recommendations on diagnosis and treatment based on the best available medical and scientific evidence. They are primarily intended for doctors and medical staff to ensure that patients receive the best possible care.

# How will this document help me?

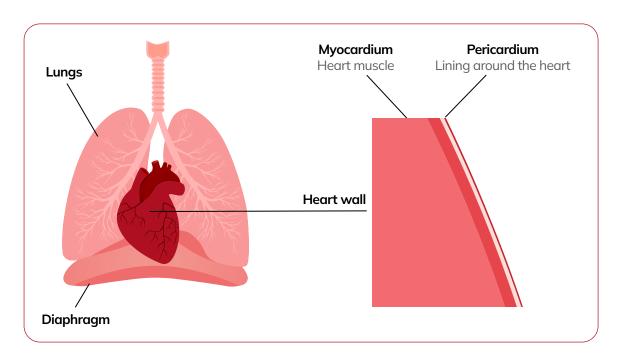
This document explains the <u>2025 European Society of Cardiology (ESC) Clinical Practice Guidelines</u> <u>for the management of myocarditis and pericarditis</u> for patients, families and carers. All statements are consistent with the text and recommendations in the main guidelines.

This easy-to-understand document covers causes, symptoms, diagnosis, treatment and ways to cope and recover. It also includes tips for daily life, special situations (like sports and pregnancy) and what to discuss with your doctor. Real-life examples help you see how others manage their conditions.

Remember, **you are the most important part of your care team**. By learning about your condition, you can work with your healthcare providers to manage your symptoms, make informed decisions and lead a healthy life.

# What are myocarditis and pericarditis?

Myocarditis and pericarditis are conditions that involve **inflammation of the heart**. In myocarditis, the **heart muscle (myocardium)** itself becomes inflamed. In pericarditis, the **lining that surrounds the heart (pericardium)** becomes inflamed.

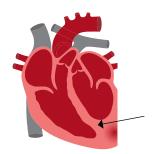


Myocarditis and pericarditis often have the same cause but affect different parts of the heart. In some cases, because the pericardium and myocardium are close together, inflammation in one part can also affect the other. 'Myopericarditis' is mainly pericarditis with some myocarditis, while 'perimyocarditis' is mainly myocarditis with some pericarditis.

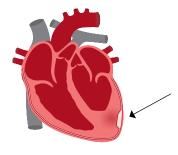
The <u>2025 ESC Clinical Practice Guidelines</u> introduce the new term 'inflammatory myopericardial syndrome (IMPS)' – this refers to the full spectrum of inflammatory myocardial and pericardial diseases, including those where both conditions overlap. This new umbrella term aims to increase awareness of the overlap and provide a new way for healthcare professionals to describe the condition during the diagnosis process. IMPS can occur in anyone – young or old, healthy or not – often following an infection or other trigger.



Healthy heart



Myocarditis
Inflammation of the myocardium
(the heart muscle)



Pericarditis
Inflammation of the pericardium (the lining around the heart)

Inflammatory myopericardial syndrome (IMPS)

## What are the causes?

Many things can trigger inflammation of the heart. The most common cause is **infection**, especially viruses. For example, common viruses, like those that cause colds, flu and COVID-19, can inflame the heart muscle or its lining. Other possible causes include bacterial or fungal infections. Sometimes pericarditis is caused by tuberculosis or Lyme disease, especially in certain areas.

**Autoimmune diseases**, where the immune system attacks the body – such as lupus and rheumatoid arthritis – can also cause myocarditis or pericarditis.

Certain **medicines and treatments** might be a cause too: cancer chemotherapy drugs, radiation to the chest, or even, very rarely, reactions to vaccines or certain medications. Some recreational drugs can also induce IMPS.

**Genetic factors** can play a role in heart inflammation. If you have relatives with unexplained heart disease, mention that to your doctor.

In many cases, the cause of the inflammation is **unknown** (called 'idiopathic').

In all cases, the underlying trigger (e.g. virus, autoimmune attack, etc.) causes the immune system to become over-active and this leads to inflamed heart tissues.





Autoimmune diseases



Medicines and treatments



Unknown

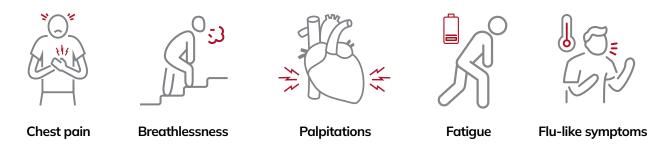
# What are the common symptoms?

Both myocarditis and pericarditis can cause chest pain and related symptoms, but the exact feelings vary. Symptoms are unspecific and may overlap with other heart diseases.

#### **Myocarditis symptoms**

Symptoms can be **mild or severe** and commonly include:

- Chest pain or discomfort. This may feel similar to a heart attack or heavy pressure on the chest.
- **Shortness of breath.** You may be out of breath doing everyday activities or even at rest if the heart isn't pumping strongly.
- Palpitations. You may feel your heart beating quickly, pounding or irregularly.
- Fatigue, tiredness or weakness. You may tire easily or feel very low in energy.
- Fever or flu-like symptoms. Because many cases follow an infection, you might have had fever, body aches, cough or a sore throat (respiratory infections), as well as nausea, vomiting, diarrhoea and abdominal pain (gastroenteritis).
- Fainting or light-headedness. If the heart rhythm is very irregular, you might feel dizzy or faint.
- Swelling in legs or abdomen. Fluid can back up and cause swelling (oedema) in severe myocarditis.



Not everyone has all these symptoms. Some people only have mild illness and may not realise their heart is affected until they see a doctor. Other times, people go to the emergency room with chest pain and find out it's myocarditis, not a heart attack.

#### **Example patient scenario - John's fatigue and palpitations**

John is a 45-year-old teacher who had several days of fatigue, feeling short of breath walking upstairs and a bit of chest heaviness. He thought it was a flu, but then he fainted while playing with his kids.

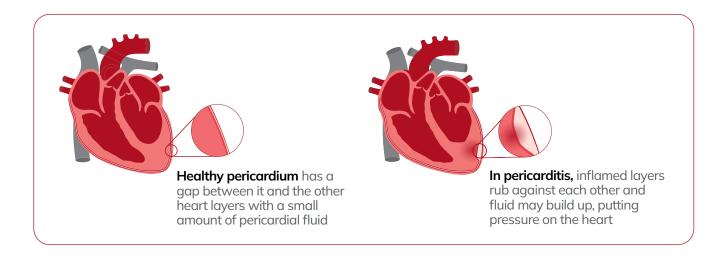
At the hospital, tests showed elevated heart enzymes and an abnormal heart rhythm, and scans confirmed myocarditis. John had a few days in hospital for monitoring and started on medication to support his heart function.

This illustrates how myocarditis can masquerade as fatigue due to flu and may lead to heart rhythm issues or heart failure symptoms.

#### **Pericarditis symptoms**

The most classic symptom is **sharp chest pain**. Typical symptoms include:

- Sharp, stabbing chest pain. It usually worsens when lying flat or breathing deeply and improves when sitting up and leaning forward. This is because the inflamed lining rubs against the heart in certain positions.
- Pain radiation. The pain may spread to the neck, shoulders or back, especially between the shoulder blades.
- Fever and fatigue. Many people feel generally unwell or have a mild fever, especially if caused by a virus.
- **Friction rub.** If a doctor listens with a stethoscope, sometimes a characteristic scratching sound (pericardial rub) is heard due to the heart layers rubbing together.
- **Breathing difficulty.** Fluid build-up (pericardial effusion) may lead to shortness of breath, especially when lying down. In severe cases, excess fluid can put pressure on the heart and stop it filling with blood (cardiac tamponade).
- **Cough or shortness of breath.** Sometimes people have a dry cough or feel short of breath due to the irritated tissues.
- Sudden onset. Pericarditis pain often comes on suddenly and can wake you up.



#### Example patient scenario – Maria's chest pain

Maria is a 20-year-old college athlete who came to the clinic complaining of sudden sharp chest pain. She noticed it was worse lying down and when she took a deep breath but a little better when sitting up. She also had a mild fever and felt "off" for a week after a cold.

The doctor heard a slight rub when listening to her heart and ordered tests. Blood tests revealed high levels of a marker of inflammation and an echocardiogram showed mild pericardial effusion. Maria had pericarditis likely from a recent virus. She was advised to rest and take medications until full recovery.

This example shows how pericarditis often presents as positional chest pain following an illness.

# When to seek help?

It's vital to know when symptoms are serious. Any of the following key warning signs should prompt immediate medical attention – call the emergency services or go to an emergency department:

- Chest pain that doesn't go away, especially if it spreads to the arms, neck or jaw. This could be IMPS or a heart attack.
- Sudden severe chest pain or feeling of pressure on your chest. Even if you suspect it's IMPS, don't ignore sudden intense pain.
- Passing out (syncope) or nearly fainting. This may indicate a dangerous heart rhythm or drop in blood flow
- **Severe shortness of breath.** Especially at rest or lying flat. This could signal fluid around the heart or heart failure.
- Very fast or irregular heartbeats (palpitations) that last for a long time or get worse.
- **Signs of shock or severe illness** including confusion, severe weakness, sweating or very low blood pressure.
- **High, persistent fever with chest pain** which could suggest complications.
- Swelling of legs, ankles or stomach that worsens quickly which may mean the heart isn't pumping well.

If symptoms are concerning but not extremely severe, contact your doctor. Always mention if your symptoms fit any of the above 'red flags'. Early treatment is important and can make recovery easier.

If you ever feel that you could be having a heart attack or stroke, **call the emergency services immediately**. It's better to be safe – even if it's IMPS or another health issue, prompt care can prevent complications.

# How is IMPS diagnosed?

Diagnosing IMPS (myocarditis and/or pericarditis) involves a combination of medical history, physical examination and tests. Here's how doctors find out what's going on:

- Medical history and exam: Your doctor will ask about symptoms (e.g. chest pain, recent illnesses, etc.) and your medical history, including family history and risk factors. They will listen to your heart with a stethoscope. In pericarditis, they might hear a scratchy pericardial rub sound. In myocarditis, heart sounds may be normal or faint if fluid has accumulated.
- **Blood tests:** These check for markers of inflammation (e.g. CRP and ESR) and heart injury (troponin and BNP). Elevated troponin suggests heart muscle damage, which may be seen in myocarditis. Blood tests can also look for viral antibodies or autoimmune markers, but this is not usually necessary.
- **Electrocardiogram (ECG/EKG):** This quick painless test records the heart's electrical activity. Typical findings with pericarditis include a change in the shape of the electrical pattern. Myocarditis can cause ECG changes, irregular rhythms or delayed electrical activity.
- **Echocardiogram (echo):** This type of scan uses ultrasound. In pericarditis, an echo can detect fluid or show if the heart is filling correctly. In myocarditis, an echo may detect a weak heart pump or heart enlargement.
- Cardiac magnetic resonance imaging (CMR): This useful type of scan can directly visualise inflammation and scarring in the heart muscle to support myocarditis diagnosis. It may also show pericardial effusion and thickening of the pericardial layer.

- **Chest X-ray:** This is often done to rule out other causes of chest pain (like pneumonia) or to check the size of the heart or the presence of fluid. It's not definitive for IMPS but is helpful overall.
- Cardiac catheterisation (coronary angiography): If doctors suspect a heart attack, they may do an angiogram to check if coronary arteries are blocked. Occasionally, a small biopsy of the heart muscle (endomyocardial biopsy) is taken, especially if myocarditis is severe or if specific treatments (immunosuppressants) are considered.
- **Coronary computed tomography (CT):** This type of scan can rule out a blocked coronary artery. The decision to use CT or angiography depends on whether risk factors for blocked arteries are present.
- **Genetic testing** may be performed during follow-up.

**Diagnosis is a process of putting all the pieces together.** Often, pericarditis can be diagnosed with history, ECG and echo alone. Myocarditis can be trickier – many cases are diagnosed based on a combination of blood markers and scans, but a CMR or even biopsy may be needed to be certain.

# **Treating IMPS**

Treatment depends on whether you have pericarditis, myocarditis or both, and on the severity. The main goals are to **reduce inflammation**, **relieve symptoms** and **prevent complications**. Most treatments are based on **medicines** although sometimes procedures are needed.

#### **Treating pericarditis**

For most people with pericarditis, the first treatments are anti-inflammatory medications and rest.

- NSAIDs (non-steroidal anti-inflammatory drugs): These are often the first choice. Over-the-counter
  medicines like ibuprofen or aspirin taken at higher doses can relieve pain and inflammation. Your doctor
  will tell you exactly which drug and dose. Usually, these are taken for a few weeks. It's important to take
  them with food and exactly as prescribed to avoid stomach issues. Medicines to protect the stomach
  may be advised.
- **Colchicine:** This medication helps reduce inflammation and importantly, **prevents recurrences**. Colchicine is often given in addition to NSAIDs for pericarditis. It is safe in most patients, including during pregnancy if needed. Common side effects can include upset stomach or diarrhoea.
- **Corticosteroids:** Steroids, like **prednisone** are powerful anti-inflammatory drugs that can help if NSAIDs/colchicine aren't enough or in cases like autoimmune-related pericarditis. Doctors use the lowest dose for the shortest time, because steroids have more side effects (weight gain, bone thinning, etc.).
- Other immunosuppressants: In rare cases, if pericarditis is chronic/recurrent and linked to an autoimmune condition, strong immune-suppressing drugs or newer agents like interleukin-1 blockers may be used.
- **Treating the underlying cause:** If an infection is found, appropriate antibiotics or antivirals are given. If another condition like kidney failure is causing pericarditis, that is treated too.
- **Draining fluid:** If there is a large fluid build-up that squeezes the heart (cardiac tamponade), a procedure called **pericardiocentesis** may be urgently needed. This involves inserting a needle or tube to drain the excess fluid off the heart. In very rare cases of chronic constrictive pericarditis (when the lining becomes very stiff), surgery to remove the pericardium (pericardiectomy) might be required.
- **Rest and monitoring:** During treatment, doctors often advise you to rest and avoid strenuous activity until symptoms improve and tests normalise. This helps the heart to heal. Mild activity like short walks might be allowed, but definitely no heavy lifting or intense exercise.

**Most people improve within days to weeks of treatment.** It's common to still feel tired for a while, but the sharp pain usually subsides. Follow your doctor's plan: finish the full course of medications even if you feel better.

#### **Treating myocarditis**

Myocarditis treatment largely focuses on supporting the heart, treating inflammation and if needed, restoring the normal heart rhythm. Because severity varies widely with myocarditis, the range of treatments is broader than with pericarditis:

- **Rest and monitoring:** Early on, strict rest is important. If hospitalised, you'll get close monitoring of heart rhythm and function. Even at home, it is important to avoid intense activity, which can worsen inflammation. The duration depends on the severity and your doctor will guide you.
- Heart failure medications: If your heart's pumping ability is weakened, doctors will treat your condition with heart failure medicines including ACE inhibitors or ARBs (to lower heart strain), beta-blockers (to slow the heart rate and improve function) and diuretics (water pills to remove fluid). These medicines help the heart pump better and prevent fluid build-up.
- Anti-arrhythmic drugs or devices: If myocarditis causes dangerous heart rhythms, you may be given medications to stabilise the rhythm or even a temporary pacemaker/defibrillator. Some people need an implantable cardioverter-defibrillator (ICD) if serious arrhythmias persist. In some patients, a life-vest will be used as a bridge while waiting for recovery or the decision to implant an ICD.
- Corticosteroids or other immunosuppressives: In specific types of myocarditis (like giant cell myocarditis or if caused by autoimmune disease), high-dose steroids or immunosuppressant drugs may be given. However, in common viral myocarditis, steroids are not always used as evidence is mixed.
- **Supportive hospital care:** Severe cases may require intensive care. This can include intravenous medications (inotropes) to support the heart's pumping abilities or even mechanical circulatory support (e.g. ECMO or ventricular assist devices) if the heart is extremely weak.
- Treating the underlying cause: If myocarditis is clearly due to something like Lyme disease, that infection is treated. In rare cases where a specific viral cause is found (like COVID-19), doctors focus on supportive care as there isn't a targeted cure. If a disease that affects the whole body is affecting the heart as well, then the therapy will target the underlying cause.
- **Medication** that is causing IMPS should be stopped immediately. This applies to alcohol or recreational drugs if they induce IMPS.
- Follow your doctor's advice about activity. The section on Special situations and populations provides more details for active people and athletes.

**Be reassured** that many patients have mild myocarditis that resolves with rest and supportive care only. Your doctor will tailor treatment to how severe your symptoms and heart dysfunction are.

#### **Outlook: Can I live a normal life?**

The good news is, **many patients recover fully from IMPS**, myocarditis or pericarditis, especially with early treatment. Most people do well and **return to normal activities** after healing. For pericarditis, full recovery often occurs in a few weeks to months. For myocarditis, it may take longer, but the heart can often regain strength with time and treatment.

#### Recovery can vary:

- Complete recovery: Many people regain full heart function and have no lasting issues.
- **Recurrent symptoms:** Pericarditis can come back in some people (recurrent pericarditis). Your doctor may keep you on colchicine or other medicines longer to prevent this.
- Long-term effects: A smaller number of patients with myocarditis develop lasting heart damage (dilated cardiomyopathy) or chronic heart failure. This depends on how severe the initial damage was. Regular follow-up helps detect and treat any problems early.

Things that improve outlook include younger age, initially mild inflammation, no serious rhythm problems and improvement on early tests. Your cardiologist will discuss your personal risk and recovery plan.

**Recovery tips:** Listen to your body and your doctor. Rest when told and pace yourself as you slowly return to daily activities. You may need weeks to feel normal. Celebrate small milestones (walking longer, climbing stairs) and ask your doctor when it's safe to do more. Stay on your medication plan and attend all follow-up visits – they help ensure your heart is truly healed.

#### Patient story - Samuel's recovery from myocarditis

"After my myocarditis diagnosis, I was scared. The doctor told me I needed to rest completely and take heart medications. I stayed in the hospital for a few days so they could watch my heart. At home, I slowly started feeling better – the palpitations eased and I had more energy. Over months, I could exercise lightly again. My follow-up CMR showed my heart was healing. Now, one year later, I'm back to normal life, taking my medications and seeing my cardiologist regularly." – Samuel, aged 32

# Lifestyle and heart-healthy habits



- **Rest during recovery:** During the active illness, take it easy. Avoid vigorous exercise and competitive sports until your doctor gives the go-ahead. For many patients with myocarditis, this can mean 3–6 months off sports.
- **Gradual exercise re-introduction:** Once your doctor approves, start with light exercise (walking, stationary bike). Monitor how you feel. If symptoms (like fatigue or chest discomfort) return, stop and consult your doctor. Over weeks, you can slowly increase activity.
- Take medications as prescribed: Adherence to your treatment plan is crucial. Set alarms or use a pillbox to remember medicines. Do not stop or change doses without talking to your doctor.
- **Vaccinations:** Stay up to date with vaccinations (flu, COVID-19, etc.) as recommended, since infections can trigger myocarditis or pericarditis.

#### General advice for a healthy heart:

- **Heart-healthy diet:** Eat a balanced diet rich in vegetables, fruits, whole grains and lean proteins. Limit salt (sodium) intake to help blood pressure. Reducing processed foods and saturated fats can ease the heart's workload.
- Avoid tobacco, recreational drugs and limit alcohol: Smoking harms blood vessels and heart function. Quitting smoking is one of the best things you can do for your heart. Alcohol can contribute to inflammation and arrhythmias, so it's wise to limit it or better stop it, especially during recovery.
- Weight and blood pressure: If you need to, work on a healthy weight. Control blood pressure, cholesterol and blood sugar as advised.
- Manage stress: Emotional stress can strain your heart. Practise relaxation techniques (deep breathing, gentle yoga, meditation). Get enough sleep each night (aim for 7–9 hours). It's normal to feel anxious or down after a cardiac illness the section on *Emotional support* provides coping strategies.

These tips will also improve overall well-being. Think of taking good care of your heart as an 'investment' – it will pay off in long-term health.

**Points to remember:** Healthy habits benefit everyone but are especially important when your heart has been weakened to help healing and prevent future problems. It's like strengthening the foundation of your house after a storm.



Maintain a healthy diet



Quit smoking



Limit alcohol consumption



Maintain a healthy bodyweight



Manage stress

# Follow-up: Working with your healthcare team

After the acute illness, **long-term follow-up** is essential to monitor your heart's recovery. Your care team (cardiologist, primary doctor, nurses) will schedule follow-up visits and tests. Here's what to expect and how you can prepare:

- **Regular check-ups:** Your doctor will likely want to see you a few weeks after the initial event, then at certain intervals e.g. 3 months, 6 months and 1 year. They will assess symptoms and may order tests to ensure your heart is healing and find any issues early. Follow-up visits will stop when doctors think you are fully recovered.
- Imaging: For myocarditis, an echocardiogram and CMR at 3–6 months can show heart function improvement. ESC experts recommend repeating at least one CMR within 6 months to look for any myocardial scars and remaining inflammation. If heart function was badly affected, follow-up might continue for years.
- **Medication review:** Doctors will adjust medications based on your progress. Don't stop them on your own. Mention any side effects there may be alternative medications.
- **Be your own advocate:** Keep a symptoms diary if you feel it is needed. Note any new chest pain, palpitations or worsening breathlessness. Share these with your doctor/nurse. You can also track your own blood pressure and weight sudden weight gain might signal fluid retention but try not to focus only on your disease as getting on with your life is important.
- **Prepare questions for your healthcare visits:** Use patient portals or nurse lines if you have concerns between visits.
- Bring a partner or family member to appointments: They might remember details or ask good questions. But only use this option if you feel it is right for you.
- **Ask about referrals:** If needed, your doctor may refer you to specialists (e.g. an electrophysiologist for arrhythmias, a rheumatologist for autoimmune causes or a cardiac rehabilitation programme).
- **Support:** Inquire about resources like nutrition counselling or support groups. Rehabilitation programmes can guide you through safe exercise and recovery.

**Remember:** Long-term follow-up is a team effort. Stay engaged and open with your healthcare team – **you** are the most important part of the team.

#### **Checklist for follow-up**

<b>~</b>	Attend all scheduled doctor visits and tests
<b>~</b>	Bring up any new or persistent symptoms (even if mild)
<b>~</b>	Review your medication list and report side effects
	Discuss return-to-activity plans (work, exercise)
<b>~</b>	Update your doctor on any life changes (stress, new diagnoses)
<b>~</b>	Prepare questions in advance and take notes during appointments

# **Emotional support and coping**

Dealing with a heart condition can be stressful and scary. It's normal to feel anxious, upset or frustrated. Your **emotional health** is as important as your heart health:



• Talk about it: Share your feelings with friends, family or other patients. Sometimes just saying "I'm scared about my heart" can relieve tension. Your family or support network can help remind you of positive progress.



• Ask for support and professional help: Don't hesitate to reach out to your doctor or nurse if feelings of depression or anxiety are severe. They can provide reassurance, answer questions or refer you to a counsellor or mental health professional.



• **Join support groups:** There are patient communities (online or local) for myocarditis/ pericarditis or more broadly, for heart health. Hearing how others cope and being part of a supportive community can help.



• Focus on what you can control: During recovery, concentrate on healthy actions (taking medicines, resting, healthy eating) rather than worrying about things you can't change immediately. Setting small, achievable goals (walk daily when permitted, finish a course of medicines) can give a sense of progress.



• **Routine activities:** Gradually resume hobbies and routines you enjoy (reading, light gardening, watching favourite shows) to maintain normalcy.



• **Stay positive:** Many people recover fully and return to normal life. Try to maintain hope. Remind yourself that you are on a treatment plan and making decisions that aid healing.

**Remember:** It's understandable to worry, but with time and care, most people do well. Use coping strategies and seek support – you're not alone on this journey.

# **Special situations and populations**

Certain life stages and activities need extra consideration when it comes to IMPS:



**Active people and athletes:** Because exercise increases heart rate, inducing stress for the heart, doctors strongly advise rest after myocarditis/pericarditis. It is usually advised that sports and vigorous exercise are stopped for at least 3 months. After that, repeat heart tests (like an echo or CMR) are performed. Training can be gradually resumed only if the heart appears fully healed and with permission from the doctor.

Pushing too soon can worsen heart inflammation and risk dangerous arrhythmias. Think of recovery as part of your season – give your heart time to win the long game.



**Pregnancy:** Heart inflammation during pregnancy is rare but needs careful management. Pericarditis in pregnancy is treated with special drug choices:

- NSAIDs can generally be used in early and mid-pregnancy but avoided later as they can affect the baby's heart.
- Low-dose aspirin is often safe to continue through pregnancy and after.
- Colchicine is considered safe in pregnancy and breastfeeding. It is often continued if the benefit is clear.
- If needed, steroids like prednisone are used due to their low risk of transfer to the baby. The dose is kept as low as possible.

When myocarditis occurs during pregnancy, treatment is similar: rest and heart failure medications that are safe in pregnancy.

Pregnant patients should be co-managed by a cardiologist and a gynaecologist familiar with heart disease. Regular monitoring of mother and baby is done throughout pregnancy. Immediate medical attention should be sought if new or worsening heart symptoms occur in pregnancy.



**Children** can get IMPS too, often after viral infections. Symptoms in kids may differ: younger children might not describe chest pain clearly but may seem very irritable, breathe quickly or refuse to eat.

- Children with myocarditis are often admitted to hospital to monitor heart rhythms closely.
- Children may be given IV fluids, electrolytes or anti-inflammatories. For pericarditis, children usually take pain relievers like ibuprofen and rest.

Paediatricians work closely with paediatric cardiologists to provide the best possible care. Kids recover well but careful follow-up is essential. School or physical activity may be limited for a while.

Parents should ensure vaccinations are up-to-date as some infections that cause myocarditis are preventable. Any unusual symptoms e.g. breathing fast, fatigue or swelling should be reported after a viral illness.



**Older adults:** Heart inflammation might overlap with other heart problems like coronary artery disease. Treatment is similar, but doctors also manage co-existing conditions, such as high blood pressure and diabetes.

For people with **immune disorders** or on immunosuppressive drugs, doctors balance treatment: sometimes reducing immunosuppression helps the heart heal, but each case is unique.

In **cancer patients**, especially those who had chest radiation or certain types of chemotherapy, any chest symptoms are carefully investigated as pericarditis may be a side effect.

No matter your age or background, always **discuss personal risks and plans** with your doctor. **Special groups often need a personalised approach.** 

# **Fact or fiction?**

By separating myths from true facts, you can approach your condition with realistic expectations and avoid unnecessary fear:

Myth	Fact
Myocarditis or pericarditis is always deadly or very serious.	<b>Most people recover completely.</b> Many cases are mild and resolve with treatment. Severe cases get intensive care, but mortality is low with proper care.
This must be a heart attack; I'll never exercise again.	<b>Myocarditis can mimic a heart attack</b> , but it is different. With time and doctor's guidance, most patients can <b>return to exercise</b> . However, you should rest during recovery and get clearance before intense workouts.
It's probably from the COVID vaccine, so I won't take my next shot.	Post-vaccine myocarditis is <b>very rare</b> and usually mild. Getting infected with a virus like COVID-19 poses a higher risk of myocarditis than the vaccine. Discuss vaccines with your doctor; staying up-to-date with vaccines protects you from infections that can hurt your heart.
If I feel better, I don't need follow-up or medications.	Feeling better is a great sign, but <b>long-term follow-up is recommended</b> . Heart inflammation can cause changes not felt by you. Follow-up tests (ECG, echocardiograms) ensure your heart is fully healed. Also, some medicines need to be continued for weeks to months to prevent recurrence.
Only older people or sick people get these.	Myocarditis and pericarditis can occur at <b>any age</b> . In fact, young and healthy people (including children and athletes) are often affected, usually from viruses. It's not only a disease of the elderly.
It means I'll have heart problems forever.	Most cases don't lead to lasting heart disease. With timely care, many regain normal heart function. Some may need long-term medications or monitoring, but <b>many live normal lives</b> post-recovery.
All treatment is medicine; there's nothing I can do.	Besides medications, lifestyle changes <b>do matter</b> . Resting when needed, healthy diet, not smoking, avoiding alcohol and managing stress all help your heart heal. You play a big role in your recovery too.
Can I fly/travel with IMPS?	It is generally safe to but discuss with your doctor. Do not taper your drugs before leaving for holidays and take enough medicines with you to cover any unexpected extensions to the length of your trip.
Are myocarditis and pericarditis infectious?	Generally, IMPS are not infectious; however, the underlying cause itself (e.g. viruses, tuberculosis) might be infectious.

# **Key takeaways**

- **Myocarditis** = inflammation of the heart muscle; **pericarditis** = inflammation of the sac lining the heart. Both are often caused by infections or autoimmune reactions.
- **Symptoms**: Chest pain is common to both. Myocarditis often causes fatigue and palpitations; pericarditis causes sharp pain that changes with position.
- **Diagnosis** involves blood tests, ECG, echocardiogram and CMR, and biopsy in selected complicated cases
- **Treatment**: Pericarditis is treated with anti-inflammatories (NSAIDs, colchicine, steroids) and possibly fluid drainage. Myocarditis is treated supportively (rest, heart medications) and more intensively if severe.
- Follow-up is crucial you'll need repeat visits and tests to ensure the heart heals.
- **Recovery:** Most patients do well. It can take weeks to months, so be patient. Report any new or worsening symptoms promptly.
- **Lifestyle:** Heart-healthy habits (diet, no smoking, avoid alcohol, moderate exercise once cleared) support recovery.
- **Emotions**: Feeling anxious is normal. Seek support, stay informed and reach out to healthcare professionals and support groups if needed.
- **Working with doctors**: Be proactive ask questions, bring notes, involve loved ones in appointments and clearly communicate your concerns.

#### **Final thoughts**

**You are not alone in this.** With good medical care, healthy habits and support, many people return to their normal lives after myocarditis or pericarditis. Keep track of your health, follow medical advice and take heart in knowing that treatment and follow-up can help you heal safely.

This guide for patients is a simplified version of the <u>2025 ESC Clinical Practice</u> Guidelines for the management of myocarditis and pericarditis.

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