CONDITION

Polymyositis - adult

Polymyositis is an uncommon immune-related condition that causes ongoing inflammation and weakness in muscles near the centre of the body.

WHAT IT IS
Inflammatory muscle condition causing progressive weakness

BODY SYSTEM
Muscles and immune system

MAIN SYMPTOMS
Hip weakness, shoulder weakness, fatigue, swallowing difficulty

WHAT CAUSES IT
Misguided immune inflammation; exact trigger unknown

HOW IT IS DIAGNOSED
Blood tests, MRI, electromyography, often muscle biopsy

MAIN TREATMENT
Steroids, immune-suppressing medicines, and rehabilitation

CAN IT BE CURED?
Sometimes - lasting remission can occur

IS IT AN EMERGENCY?
Sometimes - severe swallowing or breathing trouble

LONG-TERM OUTLOOK
Many improve, but weakness or relapses may persist

Overview

Polymyositis is an uncommon condition in which the immune system mistakenly causes inflammation in skeletal muscles. These are the muscles you control to move your body.

It mainly weakens muscles close to the centre of the body, known as proximal muscles. These include the muscles around your hips, thighs, shoulders, upper arms, and neck. Weakness usually affects both sides and develops over weeks or months.

Everyday tasks can become difficult. You may struggle to rise from a chair, climb stairs, lift objects onto a shelf, wash your hair, or hold your head up. Some people also develop problems swallowing.

Polymyositis belongs to a group called idiopathic inflammatory myopathies. "Idiopathic"

means that the exact cause is not known, while "myopathy" means a muscle condition.

The diagnosis needs careful assessment. Other inflammatory muscle conditions can look similar, including dermatomyositis, immune-mediated necrotizing myopathy, antisynthetase syndrome, and inclusion body myositis. Many people once labelled as having polymyositis would now be placed in one of these more specific groups.

Symptoms

The main symptom is muscle weakness rather than muscle pain. It generally appears gradually and affects both sides of the body.

Common effects include:

Weakness in the throat and food pipe can cause swallowing problems, called dysphagia. Food may feel stuck, or you may cough or choke while eating and drinking. A weak or nasal-sounding voice can also occur.

Breathing can be affected if the condition weakens breathing muscles or causes inflammation and scarring in the lungs. Possible symptoms include shortness of breath and a dry cough.

Polymyositis does not cause the typical skin rash seen in dermatomyositis. A rash, marked weakness of the fingers, or weakness that is much worse on one side may point toward a different type of muscle condition.

- Difficulty climbing stairs or walking uphill
- Needing your arms to push up from a chair
- Trouble lifting your arms, dressing, or washing your hair
- Difficulty carrying shopping or lifting objects
- Neck weakness or difficulty holding your head upright
- Tiredness that is out of proportion to your activity
- Aching or tender muscles in some people

Causes and risk factors

Polymyositis is considered an autoimmune condition. This means the immune system, which normally protects you from infection, attacks healthy tissue by mistake. In polymyositis, the target is muscle tissue.

The reason this happens is not fully understood. It is likely to involve a combination of immune

changes and environmental triggers in someone who is susceptible. Polymyositis is not contagious, and it is not usually inherited directly from a parent.

It develops in adults and is more often diagnosed in women. However, people of any sex or ethnic background can be affected.

Some medicines, infections, hormone problems, inherited muscle conditions, and other autoimmune conditions can cause similar weakness or abnormal muscle blood tests. These are not necessarily polymyositis, which is why a detailed assessment is important.

Inflammatory myopathies can sometimes occur alongside another autoimmune condition, such as systemic sclerosis, lupus, or rheumatoid arthritis. Certain antibody patterns may also be linked with lung inflammation.

Diagnosis

There is no single blood test that confirms polymyositis. Diagnosis is based on your symptoms, examination, test results, and the exclusion of conditions that can cause similar weakness.

A clinician will assess which muscles are weak, whether the pattern is symmetrical, and how quickly it developed. They will also ask about swallowing, breathing, rashes, joint symptoms, medicines, infections, and family history.

Tests may include:

You may also have tests of swallowing, breathing, heart function, or lung function when symptoms suggest those areas are affected.

The diagnosis is often reviewed over time. This is because another condition, particularly inclusion body myositis or immune-mediated necrotizing myopathy, may become clearer as symptoms and test results develop.

- Muscle enzyme blood tests: Creatine kinase, or CK, often rises when muscle cells are damaged. A normal result does not explain every case of weakness.
- Autoantibody tests: These look for immune proteins associated with particular inflammatory myopathy patterns. They may help classify the condition but do not confirm polymyositis by themselves.
- Magnetic resonance imaging: An MRI scan can show muscle inflammation and help choose an appropriate site for biopsy.
- Electromyography: EMG measures electrical activity in muscles and can identify a pattern of muscle damage.

- Muscle biopsy: A small sample of muscle is examined under a microscope. This can show inflammation and help distinguish polymyositis from other muscle conditions.

Treatment and management

Treatment aims to reduce inflammation, preserve muscle function, improve daily activity, and prevent complications. Care is often coordinated by a rheumatologist or neurologist with experience in inflammatory muscle conditions.

Corticosteroids like prednisone or hydrocortisone are commonly used to control inflammation. These medicines can act relatively quickly but may cause side effects, especially when used for a long time. Monitoring may include blood pressure, blood sugar, bone health, infection risk, and eye health.

Another medicine that reduces immune activity is often used to improve control or limit long-term steroid exposure. The choice depends on factors such as symptom severity, lung involvement, other medical conditions, pregnancy plans, and previous treatment response.

Intravenous immunoglobulin, known as IVIG, may be considered for severe swallowing problems or symptoms that have not responded adequately to other treatment. Other immune-targeting treatments may be used in selected cases.

Rehabilitation is an important part of care. A physiotherapist can plan gradual strengthening and aerobic activity without pushing inflamed or severely weak muscles too hard. Long periods of inactivity can worsen weakness, but exercise may need to be adjusted during an active flare.

An occupational therapist can suggest equipment or changes that make dressing, bathing, cooking, work, and household tasks safer. A speech and language therapist can assess swallowing and recommend safer food textures or swallowing techniques when needed.

Treatment response is followed through your strength, function, symptoms, and blood tests. A falling CK level can suggest less muscle damage, but day-to-day ability and measured strength are also important.

Complications

Swallowing weakness can allow food, drink, or saliva to enter the airway. This is called aspiration. It can cause choking, dehydration, weight loss, or a chest infection.

Weak breathing muscles can reduce your ability to take a deep breath or clear mucus. Some inflammatory myopathy patterns also cause interstitial lung disease, which means

inflammation or scarring in the tissue around the lung air sacs.

Severe weakness can lead to falls, reduced mobility, and loss of independence. Muscles can shrink when weakness and inactivity continue for a long time.

Heart involvement is less common but can include an abnormal heart rhythm or inflammation of heart muscle. New chest pain, fainting, or a fast or irregular heartbeat needs prompt assessment.

Treatment can also cause complications. Immune-suppressing medicines may increase infection risk, while long-term corticosteroid use can affect bones, muscles, blood sugar, blood pressure, and eyes. Regular monitoring is used to identify these problems early.

Some inflammatory myopathies are associated with cancer. The level of risk is not the same for every subtype or antibody pattern. Your healthcare team may recommend routine age-appropriate cancer screening and, in some situations, additional checks.

Prevention

Polymyositis cannot currently be reliably prevented. Its exact trigger is unknown, and there is no established lifestyle change that stops it from developing.

If you have the condition, treatment and monitoring can help prevent avoidable complications. Following a suitable rehabilitation plan can reduce loss of strength and mobility. Swallowing assessment can lower the risk of aspiration, while recommended monitoring can identify lung problems or treatment side effects.

Reducing infection exposure may matter when you take medicines that suppress the immune system. Vaccination plans should be discussed with your healthcare team because the timing and type of vaccine may be affected by treatment.

Living with it and what to expect

Recovery is usually gradual. Muscle inflammation may improve before full strength returns because weakened muscles need time and rehabilitation to rebuild. Some people notice benefits within weeks of treatment, while meaningful functional recovery may take months.

The course is not the same for everyone. Some people reach a lasting period with few or no active symptoms, known as remission. Others have relapses, need ongoing medicine, or keep some degree of weakness. Lung or swallowing involvement can make the condition more complex.

Follow-up commonly includes strength checks, questions about daily activities, and blood tests. Lung, swallowing, heart, or bone assessments may be repeated when relevant. Routine follow-up is important even when symptoms are stable because treatment may need gradual adjustment.

Plan activity around your energy and strength rather than avoiding movement completely. Rest after demanding tasks, divide larger jobs into smaller steps, and use railings or mobility aids if advised. Report repeated falls or a clear decline in function rather than waiting for the next scheduled review.

Polymyositis can affect work, family roles, and emotional wellbeing. Temporary changes to hours, lifting duties, travel, or workplace layout may help. Support from rehabilitation professionals, family, and patient groups can make long-term changes easier to manage.

When to get medical help

Arrange a routine medical appointment if you develop gradually worsening difficulty climbing stairs, rising from a chair, lifting your arms, or completing usual tasks. These symptoms have many possible causes and need proper assessment rather than self-diagnosis.

Contact your healthcare team promptly if diagnosed weakness is clearly worsening, swallowing becomes more difficult, you have repeated falls, or treatment causes concerning side effects. Fever or other signs of infection also deserve prompt advice if you take immune-suppressing medicine.

Seek urgent medical care if you:

Call emergency services for severe breathing difficulty, choking that does not clear, blue or grey lips, sudden severe chest pain, or loss of consciousness.

- Cough or choke repeatedly when eating or drinking
- Develop new or rapidly worsening shortness of breath
- Cannot swallow liquids or keep yourself hydrated
- Have new palpitations, marked dizziness, or fainting

Common questions

Is polymyositis a type of muscular dystrophy?

No. Muscular dystrophies are usually inherited conditions caused by changes in genes.

Polymyositis is an acquired inflammatory condition involving abnormal immune activity. Some symptoms overlap, but the causes and treatments are different.

Does polymyositis cause pain?

It can cause aching or tenderness, but weakness is usually the main problem. Severe pain without clear weakness may suggest another cause and should be assessed on its own merits.

Can polymyositis go away completely?

Some people reach long-lasting remission and may eventually need little or no treatment. Others have relapses or persistent weakness. There is no way to promise an individual course when the condition is first diagnosed.

Can I exercise with polymyositis?

Exercise is often part of treatment, particularly once inflammation is being controlled. The type and intensity should match your current strength and disease activity. A physiotherapist familiar with muscle conditions can help you progress safely.

Why might my diagnosis change later?

Several inflammatory and degenerative muscle conditions look alike at first. Antibody results, biopsy findings, treatment response, and the pattern of weakness over time may support a more specific diagnosis. A revised label can help guide monitoring and treatment.

Is polymyositis linked to cancer?

Inflammatory myopathies can be associated with cancer, but the risk differs between subtypes and individual risk profiles. Continue routine screening and complete any additional checks recommended after your assessment.

Sources

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