

What is Myositis?

Myositis is the medical term for muscle inflammation. This causes the muscle to be weak and can also cause muscle ache and swelling.

There are many types of myositis but the major types include:

- **Dermatomyositis** – in addition to muscle weakness there is also a rash on the skin especially around the eye-lids and the fingers. Cancer is found in approximately 10% - 20% of cases. Sometimes, the muscle problem develops first. In other cases, the cancer is detected before the myositis.
- **Polymyositis** – the condition affects the muscles alone without any rash. It is usually not associated with cancer.
- **Inclusion body myositis** – the condition causes severe muscle weakness and wasting throughout the body over a long period of time.
- **Drug-induced myositis** – the condition is triggered by the body's response to a type of cholesterol lowering drug called statins. The symptoms of muscle pain and weakness can manifest over a short period of time, but patients can also improve rapidly once the medication is stopped.

Who gets affected?

Myositis is a rare condition, affecting about 5 to 10 persons per million worldwide. While it can affect people of any age, there are two main clusters of patients: children between the ages of 5 to 15 years and adults between the ages of 30 – 65 years. Generally, women are twice as likely to develop myositis than men.

What are the symptoms?

The major symptoms common to all forms of myositis are muscle weakness and muscle pain. Other symptoms vary, depending on the specific cause of the disease.

In dermatomyositis and polymyositis, weakness usually affects muscles near the centre of the body like the neck, shoulders and hips. Patients can experience difficulty with simple tasks like combing their hair, dressing, getting into a car, standing up from a sitting position or climbing stairs. About one third or half of such patients also have problems swallowing and often choke when drinking fluids. Some patients with dermatomyositis and polymyositis also have lung involvement which results in cough and breathlessness.

General symptoms like lethargy, fatigue, weight loss and poor appetite are also very common.

How is it diagnosed?

Due to the many different forms of myositis and similarities to other muscular and nerve diseases, it may take a few visits to the doctor before the condition can be diagnosed. After a careful physical examination, the doctor will order other tests to confirm the diagnosis.

Such tests may include:

- Routine tests like a full blood count and ESR and CRP.
- Blood tests for muscle enzymes and auto-antibodies. Muscle enzyme levels (usually raised initially) are useful for monitoring progress and response to treatment.
 - **An electromyogram (EMG)**
This is a test that measures the electrical activity of muscles. In patients with myositis the EMG would be abnormal.
 - **A muscle biopsy**
The doctor takes a sample of the affected muscle to be checked under the microscope. The procedure is done under local anaesthesia.
 - **X-ray of the chest**
To investigate for lung cancer and lung involvement associated with myositis.
 - **Magnetic Resonance Imaging (MRI)**
This painless scan can identify abnormal muscles and can be used to locate the best site for a biopsy and to monitor the progress of the disorder.
 - **A chest and abdominal CT scan**
This test is useful to investigate for hidden cancers.
 - **Gastroscopy and colonoscopy**
These tests are useful to investigate for underlying cancers in the gastrointestinal tract.

How is it treated?

There is currently no cure for myositis. Treatment strategies focus on alleviating symptoms and managing the progression of the condition.

a. Medications

For dermatomyositis and polymyositis, doctors usually start with high dose corticosteroids (eg. prednisolone) for about 4 – 6 weeks. When the condition improves the dosage is then slowly reduced. Other immunosuppressive treatments may be added (eg. methotrexate).

Intravenous immunoglobulin (IVIG) (an injection of antibodies) may occasionally be effective in cases that fail the above first-line treatments. If IVIG is effective, it needs to be continued on a long term basis, although in lower doses to maintain the effect.

Another form of treatment in patients who do not respond well to conventional drugs is plasmapheresis or plasma exchange. This is a type of blood cleansing in which the damaging antibodies are removed from the blood. Often the effect is temporary.

In patients with drug-induced myositis, the medication causing the myositis will need to be stopped and replaced with an alternative. At the moment there is no effective treatment for inclusion body myositis.

b. Exercise

Physical therapy and specially designed exercise programmes are very important for recovery of muscle strength.

c. Dermatomyositis associated with cancer

Treatment of the underlying cancer should take priority either by surgery, chemotherapy or radiotherapy.

What can patients expect?

Most people with dermatomyositis and polymyositis eventually regain their strength with proper treatment. Many patients do not die of the disease per se but of complications like infections, especially that of the lung as a result of swallowing and breathing difficulties.

Inclusion myositis usually progresses very slowly and does not affect a person's lifespan unless complications like infections set in.

In most cases of drug-induced myositis, the symptoms subside when the offending drug is stopped.

Concerns during pregnancy

Pregnancy may worsen the signs and symptoms in women with active disease. Active Myositis can also increase the risk of premature birth or stillbirth. If the woman is in remission the risk is much lower. Always discuss with your doctor if you have pregnancy in mind.

When to call a professional?

- Muscle pain and weakness that is progressive and does not go away with rest.
- A red or purplish rash on your face or around your eyes.
- Muscle pain and weakness that begins after you start taking a new medication like a cholesterol-lowering drug.
- If you have been diagnosed with myositis and develop a fever, cough or other forms of infection like skin infection, abscess or pain on passing urine.

Any infections in patients with myositis need to be treated urgently and aggressively with antibiotics and often in hospitals.

Coping and support

- Know your illness. Discuss with your doctor and nurse and seek more information from reliable sources.
- Have adequate rest and sleep. Eat a nutritious diet and pace your daily activities. Do not overdo things or tire yourself. Stretch often and do gentle exercises at home.
- Keep a positive attitude and do not isolate yourself.
- Wear sunscreens when you go out into the sun, especially if you have a rash.

Information modified from National Arthritis Foundation, Singapore



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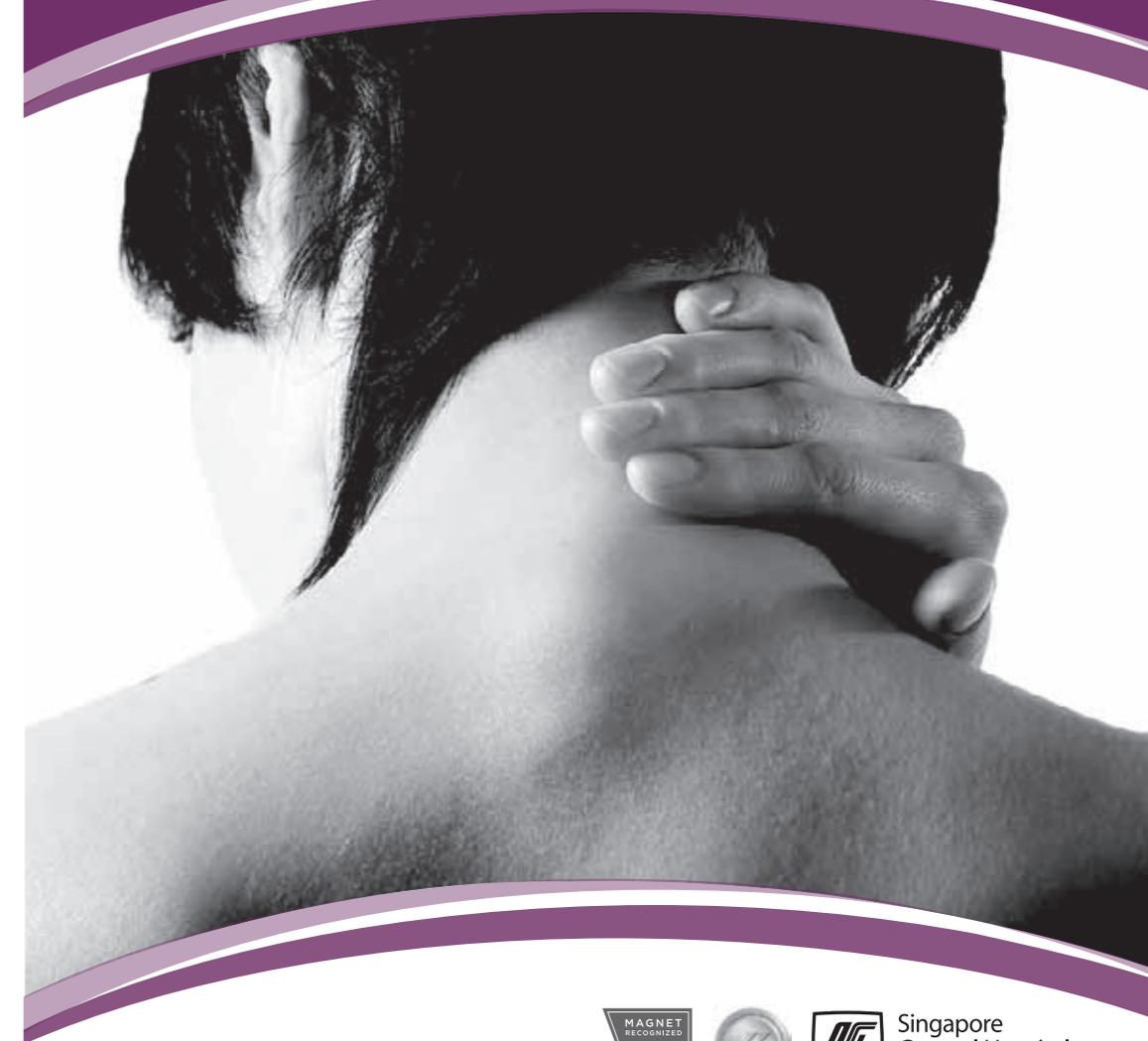
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Myositis



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