Myositis

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Myositis
(Polymyositis / Dermatomyositis)

Myositis is a disease characterized by inflammation of the muscles and is often associated with severe muscle weakness. Myositis can also affect other organ systems including the skin, joints, lungs, heart, and gastrointestinal tract. It is a chronic disease, meaning it lasts a long time. The most common forms of myositis are polymyositis and dermatomyositis.

Myositis is a systemic autoimmune disease. This means that the body's natural immune system does not behave normally. Instead of serving to fight infections such as bacteria and viruses, the body's own immune system attacks itself. In myositis, autoimmunity may cause the immune system to attack specific muscles resulting in muscle damage and destruction. The immune system may also attack other organs such as the lungs, skin, joints and gastrointestinal tract.

What are Some of the Symptoms of Myositis?

As an autoimmune disease that mostly targets muscles, myositis most obvious symptoms manifest themselves in muscle fatigue and pain. The disease may have many other symptoms. Common symptoms of myositis include:

- Muscle weakness
- Muscle pains
- Rashes
- Fatigue
- Weight loss
- Low-grade fevers
- Arthritis
- Color changes of hands and feet with cold exposure (known as Raynaud's)
- Difficulty swallowing
- Heartburn
- Cough
- Shortness of breath

Who Gets Myositis?

Although myositis is a rare disease, people of all races and ethnic backgrounds get the disease. The peak age of onset is in the 50s, although it can occur at any age. Inclusion body myositis is more common in men, while dermatomyositis and polymyositis are more common in women.

What Causes Myositis?

The cause of myositis remains unknown. We do know that myositis is an autoimmune disease. In myositis, autoimmunity leads to inflammation of specific muscles. This inflammation results in muscle damage and may lead to muscle cell death. Many different muscle groups may be involved in the disease ranging from muscles of the arms and legs to those of the respiratory and gastrointestinal systems. In addition, the abnormal immune response can lead to other problems including, damage to blood vessels, joints, lungs and the heart.

Are There any Other Effects or Concerns?

Studies have shown that people with myositis have a higher risk of developing different types of cancer. The vast majority of people with myositis do not develop cancer. It is important to be aware of this association and perform age-appropriate cancer screening.

How is Myositis Diagnosed?

Often times it is difficult to diagnose myositis. Most often, a specialist in autoimmune diseases, known as a rheumatologist, is required to establish the diagnosis.

The diagnosis of myositis is based on the careful analysis of many factors. A thorough history and physical examination are essential for the diagnosis. There are certain laboratory studies that are helpful when considering the diagnosis of myositis. It is important to know that the diagnosis cannot be made based on any specific blood test.

To help in the evaluation, it is often necessary to perform specific muscle testing. One such test is called an electromyogram, or EMG for short. The EMG involves testing of specific muscle groups. In an EMG test, surface electrodes measure the muscles responses to small needle pricks. A magnetic resonance imaging (MRI) scan of the muscles can be helpful in demonstrating inflammation in the muscles. In addition to specific muscle testing, it may be necessary to perform a biopsy of the involved muscle to confirm the diagnosis of myositis.

How is Myositis Managed?

Early recognition of the disease is essential. This will allow for early treatment for people with myositis. Because it is a chronic disease with no cure, lasting a long time, people often need medical therapy for many years.

There are many medicine options for people with myositis. Most people require immunosuppressive medicines. This helps control the inflammation and damage caused by the abnormal immune response. Medicines used in myositis include prednisone, hydroxychloroquine, methotrexate, azathioprine, cyclosporine, mycophenolate, mofetil, cyclophosphamide, rituximab, cyclosporine tacrolimus and gamma globulin infusions. Each of these medicines has its own side effect and toxicity profile. Each often requires regular blood testing and clinical monitoring to ensure safety.

In addition to medical therapy for myositis, many people require physical therapy, speech therapy and rehabilitation. Under the guidance of rehabilitation therapists, patients learn how to appropriately rest, exercise, and strengthen the various muscle

groups affected by myositis.

What is the Role of National Jewish Health?

National Jewish Health is one of the world's leaders in the study and management of immune diseases, such as myositis. National Jewish Health also specializes in Interstitial Lung Disease (ILD), a lung condition that may be seen in patients with myositis. The National Institutes of Health has designated and funded National Jewish Health as a Specialized Center of Research for ILD.

Our health care providers have vast experience in treating people with myositis. We provide the expertise needed for the comprehensive evaluation and management of people with myositis. We aim to design an individualized treatment plan best suited for each patient.

In addition, in order to provide for comprehensive care of our patients with myositis, National Jewish Health also provides physical, occupational, and recreational rehabilitative services in our rehabilitation department.

Visit our website for more information about support groups, clinical trials and lifestyle information.

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