

Polymyalgia Rheumatic: Diagnosis and Treatment

Abstract

Polymyalgia rheumatica (PMR) is a syndrome with pain or stiffness, usually in the neck, shoulders, upper arms, and hips, but which may occur all over the body. The pain can be very sudden, or can occur gradually over a period. Most people with PMR wake up in the morning with pain in their muscles; however, cases have occurred in which the person has developed the pain during the evenings or has pain and stiffness all day long. People who have polymyalgia rheumatica may also have temporal arteritis (giant cell arteritis), an inflammation of blood vessels in the face which can cause blindness if not treated quickly. The pain and stiffness can result in a lowered quality of life, and can lead to depression. It is thought to be brought on by a viral or bacterial illness or trauma of some kind, but genetics play a role as well. Persons of Northern European descent are at greater risk. There is no definitive laboratory test, but C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR) can be useful. PMR is usually treated with corticosteroids taken by mouth. Most people need to continue the corticosteroid treatment for two to three years. PMR sometimes goes away on its own in a year or two, but medications and self-care measures can improve the rate of recovery.

Keywords: Polymyalgia Rheumatic (PMR) • Autoimmune disease • Inflammatory disorder • Joint pain • Stiffness • Shoulder pain • Hip pain • Morning stiffness • Fatigue • Erythrocyte sedimentation rate (ESR)

Introduction

A wide range of symptoms can indicate if a person has polymyalgia rheumatica. The classic symptoms include:

Polymyalgia rheumatica ("PMR", sometimes called just polymyalgia) is a syndrome or condition. It causes pain in the joints and muscles of the upper body. Most people with PMR have pain during the morning. Sometimes the pain is in the late afternoon or evening. About 15% of people having PMR may also have temporal arteritis. PMR affects more women than men. PMR usually happens in people age fifty and older. People under age 50 can be affected, although only rarely. One blood test usually performed is the erythrocyte sedimentation rate (ESR) which measures how fast the patient's red blood cells settle in a test tube. The faster the blood cells settle, the higher the ESR value, which means inflammation, is present. Prednisone is the

drug of choice for PMR. Treatment duration is often more than one year. If the patient does not experience dramatic improvement after three days of 10–20 mg oral prednisone per day, the diagnosis should be reconsidered. Sometimes relief of symptoms occurs in only several hours [1, 2].

Materials and Method

Signs and symptoms

Pain and stiffness (moderate to severe) in the neck, shoulders, upper arms, thighs, and hips, which inhibits activity, especially in the morning/after sleeping. Pain can also occur in the groin area and in the buttocks. The pain can be limited to one of these areas as well. It is a disease of the "girdles" meaning shoulder girdle or pelvic girdle.

1. Fatigue and lack of appetite (possibly leading to weight loss)

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2. Anemia
3. An overall feeling of illness or flu-like symptoms.
4. Low-grade (mild) fever or abnormal temperature is sometimes present.

In most people, it is characterized by constant fatigue, weakness and sometimes exhaustion. About 15% of people who are diagnosed with polymyalgia rheumatica also have temporal arteritis, and about 50% of people with temporal arteritis have polymyalgia rheumatic. Some symptoms of temporal arteritis include headaches, scalp tenderness, jaw or facial soreness, distorted vision, or aching in the limbs caused by decreased blood flow, and fatigue [3, 4].

Diagnosis

No specific test exists to diagnose polymyalgia rheumatica; many other diseases can cause inflammation and pain in muscles, but a few tests can help narrow down the cause of the pain. Limitations in shoulder motion, or swelling of the joints in the wrists or hands, are noted by the doctor. A patient's answers to questions, a general physical exam, and the results of tests can help a doctor determine the cause of pain and stiffness.

One blood test usually performed is the erythrocyte sedimentation rate (ESR) which measures how fast the patient's red blood cells settle in a test tube. The slower the red blood cells settle, the higher the ESR value (measured in mm/hour), which means inflammation is present. Many conditions can cause an elevated ESR, so this test alone is not proof that a person has polymyalgia rheumatic [5].

Another test that checks the level of C-reactive protein (CRP) in the blood may also be conducted. CRP is produced by the liver in response to an injury or infection, and people with polymyalgia rheumatica usually have high levels. However, like the ESR, this test is also not very specific.[citation needed] Polymyalgia rheumatica is sometimes associated with temporal arteritis, a condition requiring more aggressive therapy. To test for this additional disorder, a biopsy sample may be taken from the temporal artery [6].

Treatment

Prednisone is the drug of choice for PMR, and treatment

duration is frequently greater than one year. If the patient does not experience dramatic improvement after three days of 10–20 mg oral prednisone per day, the diagnosis should be reconsidered. Sometimes relief of symptoms occurs in only several hours[citation needed].

Nonsteroidal anti-inflammatory drugs (nsaids) such as ibuprofen are ineffective in the initial treatment of PMR, but they may be used in conjunction with the maintenance dose of corticosteroid. Along with medical treatment, patients are encouraged to exercise and eat healthily, helping to maintain a strong immune system and build strong muscles and bones. A diet of fruits, vegetables, whole grains, and low-fat meat and dairy products, avoiding foods with high levels of refined sugars and salt is recommended. Research in the UK has also suggested that people with polymyalgia rheumatica would benefit from a falls assessment when first diagnosed, and regular treatment reviews [7, 8].

Conclusion

Polymyalgia rheumatica is a relatively common inflammatory disease that occurs in patients over the age of 50. On average, patients are over 70 years at disease onset. The hallmark of polymyalgia rheumatica is shoulder and hip girdle pain with pronounced stiffness lasting at least one hour. Inflammatory markers, including erythrocyte sedimentation rate and C reactive protein, are almost always raised at disease onset. Mimics of polymyalgia rheumatica include malignancy, infections, metabolic bone disease, and endocrine disorders. Giant cell arteritis is seen in at least 30% of patients, and the symptoms and signs include new headache, scalp tenderness, jaw pain on chewing, and visual disturbances (which should be evaluated by temporal artery biopsy). Polymyalgia rheumatica is treated with glucocorticosteroids at an initial dose of prednisone 15 mg per day, and symptoms should improve dramatically. Drug related side effects include diabetes, hypertension, hyperlipidaemia, and osteoporosis. These side effects must be monitored and measures should be taken to prevent and manage them [9, 10].

Acknowledgement

None

Conflict of Interest

None

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