

Polymyalgia rheumatica (PMR) is a condition that is frequently linked to giant cell arteritis (GCA) (link). PMR occurs in about 50 % of patients who have GCA, while approximately 15% of patients with PMR develop GCA. There may be a common genetic component between the two disorders. PMR is almost exclusively a disease that affects older adults and is rarely diagnosed in people under the age of 50 years.

Symptoms: Symptoms of PMR almost always include aching and morning stiffness in the shoulders, hips, neck and mid-body. These symptoms usually affect both sides of the body the same, but can be stronger on one side than the other. Having difficulty with pain, stiffness and movement of the shoulders and hips can result in trouble with things such as getting dressed. Some patients also complain of general tiredness, weakness, weight loss (without trying to lose weight), and a low fever (a high spiking fever is rare).

Inflammation in the bones and joints cause the discomfort and stiffness (difficulty in moving) found among patients with PMR. Some patients develop swelling or fluid retention (edema) of the hands, wrists, ankles, and top of the feet. The edema usually occurs with other signs of PMR but can be the only symptom experienced.

Decreased ability to fully move the shoulders, neck and hips is frequent. Muscle strength is usually normal and the tenderness found about the shoulders is more likely due to inflammation in the shoulder bones. However, muscle weakness may become a problem over time because of the lack of use due to pain and stiffness.

The characteristic **laboratory** finding in both PMR and GCA is an elevation in the erythrocyte sedimentation rate. This rate measures how fast a patient's red blood cells settle when placed in a small tube.

Routine x-rays (radiographs) of joints with the disease rarely reveal any abnormalities, while magnetic resonance imaging (MRI) examinations can confirm the presence of inflammation. Ultrasounds and Positron emission tomography (PET scanning) have also been used to confirm the PMR inflammation.

Since there is no specific test for PMR, a checklist that requires a certain group of symptoms and laboratory characteristics is used by doctors to make the diagnosis.

There is considerable overlap between PMR and GCA but patients with "pure" PMR lack the symptoms of GCA. Thus, a biopsy of the temporal artery, which is diagnostic for GCA, is not necessary in patients with PMR unless there are symptoms suggestive of GCA.

Treatment: The beneficial effect of corticosteroids (prednisone) in patients with PMR has been established by a combination of clinical experience and several research studies. Initial treatment most often starts with a dose of prednisone between 7.5 and 20 mg/day. Patients usually respond quickly but the dose is increased if the symptoms are not well controlled within one week. In some patients a single daily dose of prednisone does not provide relief from evening or night-time pain or stiffness while a divided dose (2 times a day, usually 12 hours apart) may be more helpful in reducing symptoms. The effective steroid dose is maintained for 2-4 weeks after the symptoms have resolved. The dose is then gradually lowered and stopped, with careful monitoring for return of symptoms.

Return of symptoms (relapse) occurs in as many as 25-50% of patients. Relapse is more likely to occur if the steroid dose is decreased too fast. If symptoms return, restarting or increasing the dose of corticosteroids is appropriate.

Side effects with corticosteroids: The risk of diabetes (abnormal glucose blood levels) and risk of fractures (small cracks) in the bones of the back, hip and neck are increased, especially with frequent use of this therapy. In patients who require corticosteroid treatment for more than six months, an assessment of bone density is suggested to test for osteoporosis (loss of bone thickness). To help protect bones from fractures and osteoporosis, calcium and vitamin D are often taken regularly, and sometimes drugs such as bisphosphonates are given.

In patients who have side-effects from or a long history of taking corticosteroids, the use of **methotrexate** may allow the corticosteroid dose to be eliminated or lowered, however this has only been suggested by some, but not all, studies. Anti-inflammatory drugs such as ibuprofen can also be used to decrease painful symptoms, especially when symptoms are only mild, and may also help avoid use of corticosteroid treatment

Effort must be focused at control of symptoms with a minimum of drug-induced side effects. In most patients, symptoms of PMR will eventually end (over a period of months to years) and corticosteroid therapy can be discontinued.