

POLYMYALGIA RHEUMATICA (PMR)

Moira Watson

WHAT IS PMR AND HOW DOES IT START?

Polymyalgia Rheumatica ('poly' = many; 'myalgia' = painful/aching muscles), hereafter referred to as PMR, is an inflammatory rheumatic condition characterised by pain and stiffness usually in the shoulders and thighs and also the neck. It affects almost exclusively people aged over 50 years, with the average age of onset being 70 years. In some people the onset is very sudden, literally overnight. In others there is a more gradual development over a few weeks. In an article on the netdoctor.co.uk website, there is reference to a "flu-like illness just prior to the onset of symptoms" being noticed by some patients, but the article goes on to state that in most cases PMR is spontaneous.

There is no known cause of PMR as yet, but recent studies and research are investigating the role of genetic predisposition, immune system abnormalities and environmental factors in both PMR and Giant Cell Arteritis (GCA) – an associated condition, described later.

PMR may simply disappear in one to several years without treatment (please refer to section headed 'Treatment'). With treatment, the symptoms are usually controlled quite quickly but recurrence is likely if treatment is stopped too early. For the majority of people it is generally expected that treatment will be required for two or more years, but some people may have to continue treatment for many years.

In my search for information and research on PMR, I discovered that for many of the conditions that mimic PMR and that PMR might be wrongly diagnosed as, such as fibromyalgia (please see section headed 'Differential Diagnosis'), there is a great deal known and a broad range of information available, while there is relatively little in the case of PMR. While acknowledging that some studies and websites are more reliable than others, perhaps this lack of research is one of the reasons that there were some inconsistencies in the information, such as a range in incidence in relation to gender from equality between males and females to a ratio of 3:1 females to males.

EPIDEMIOLOGY

In the majority of the literature, there was consensus on the following. Women appear to be two times as likely as men to be affected. While PMR can affect people of any race, there is evidence to show that PMR is significantly more common in Caucasians, particularly in Northern Europe and Scandinavia, than Asian or Afro-Caribbean people, e.g. annual incidence:- approximately 4 per 1,000 people affected in the UK and just under 1.5 per 1,000 affected in South Norway (*figures from: – ARC Topical Review, netdoctor website, Mayo Clinic website, eMedicine website*). There are wide variations in incidence rates by country and this is stated as one of the reasons that genetic factors are being investigated as a possible cause.

SIGNS AND SYMPTOMS

The pain and stiffness is usually worse in the morning and can be severely debilitating. It differs from other 'aches and pains' in not being eased by painkillers; it feels different from pain experienced following unaccustomed exercise. The stiffness may be so severe that getting out of bed in the morning is difficult or impossible, climbing stairs may be difficult and the pain may cause broken sleep and erratic sleep patterns developing. Prolonged rest or inactivity may increase the stiffness but equally 'pushing yourself too far' can bring on the symptoms. Stiffness usually eases during the day. Symptoms may be unilateral initially but become bilateral.

Other symptoms might include fever, weight loss, fatigue, depression and generally feeling unwell. Some people may experience inflammation and swelling in other soft tissues, for example tenosynovitis or carpal tunnel syndrome and some joints may become slightly swollen. In later stages muscle atrophy or frozen shoulder might develop. Muscle strength is usually normal.

The most serious complication of PMR is the development of another related condition – Temporal Arteritis, also known as Giant Cell Arteritis (GCA).

MESSAGE | WORLD

The Massage and Body Therapists Magazine

SUBSCRIBE NOW!

£25 for 12 issues | £20 student rate



Diorama Arts Centre • 34 Osnaburgh Street
• London NW1 3ND • T/F 020 7387 9111
Email. MessageWorld@btconnect.com

or download our subscription form at
www.healthypages.co.uk

The exact relationship between PMR and GCA is unclear but it is estimated that approximately 15-25% of people with PMR also develop GCA. Interestingly, between 40-60% of those with GCA have PMR. This condition causes the inflammation of the lining of the arteries of the skull, mostly the temporal arteries, although any artery may be affected (temporal, ophthalmic and vertebral most commonly). Signs and symptoms include severe headaches, pain at temples on touch, vision problems and jaw pain. Untreated, GCA can lead to damage to the temporal arteries, a stroke or aneurysm or loss of vision. It is important that these signs and symptoms are noted as soon as possible; GCA may develop before or simultaneously with the PMR or after the PMR has disappeared.

DIFFERENTIAL DIAGNOSIS

There is no single test available to definitely diagnose PMR. The patient's history is crucial in a diagnosis of PMR: – at the top of the list must be the description of the onset of the pain and type of pain; when and how the pain and stiffness arises during the day (worse after inactivity or activity?). This is combined with the results of an ESR (erythrocyte sedimentation rate) blood test that measures the rate at which the red blood cells fall to the bottom of the tube. In PMR, the sedimentation rate is usually high. This test also measures inflammation in the body. Other tests may be undertaken, for example, the CRP (C-reactive protein) test; the patient may also be tested for the RF antibody that is often present in people with rheumatoid arthritis for the purposes of elimination of that condition.

A variety of conditions can present with polymyalgic symptoms and it is important that these are excluded before a diagnosis of PMR is made, they include:- Rheumatoid Arthritis, Osteoarthritis (in neck, shoulders and back), polymyositis (muscle inflammation), cervical spondylosis, bilateral shoulder conditions (e.g. adhesive capsulitis), underactive thyroid, depression, Parkinsonism, myeloma (cancer of bone marrow) and fibromyalgia. The articles in the eMedicine and ARC websites suggested that an MRI scan of the shoulders might reveal subdeltoid, subacromial and bicipital bursitis.

In summary, a diagnosis of PMR can only be made after taking a comprehensive medical history, the patient's own account and experience of the condition, physical examination and blood tests. If the patient is under 50 years, the condition has chronic onset, there is no inflammatory stiffness and ESR and CRP results are normal, these provide important clues to a non-PMR diagnosis. The possibility of other conditions developing at a later stage has to be taken into account and there should be consideration of signs and symptoms of GCA.

TREATMENT ISSUES

The treatment currently favoured for PMR is corticosteroids, with prednisolone the most commonly prescribed drug. The initial daily dose, usually oral, begins at about 15mg, depending on the severity of the condition. The dose is reduced gradually over time on the basis of blood test results. In most of the articles that I read, it was recommended that patients with PMR who are prescribed with corticosteroids should also take calcium and vitamin D. Because it is known that both inflammation and the side effects of steroid treatment can affect bone density, those 'at risk' may also be prescribed medications to prevent bone loss. In mild cases, the initial treatment may be NSAIDs (non-steroidal anti-inflammatory drugs) but these tend not to ease the symptoms of many PMR sufferers; and in some prolonged cases, 'steroid sparing' drugs such as methotrexate might be used. An intramuscular depot injection may be used as this *"has the advantage of much lower cumulative dose compared with oral prednisolone and translates into lower steroid-related toxicity"* (ARC Topical Review). Treatment is often required for two years or longer and occasionally some people remain on small doses of steroids for many years.

The many variables involved in reaching a diagnosis of PMR and the very individualistic nature of the condition underlines the absolute importance of taking a comprehensive history and adopting a holistic approach to treatment.

While there is no literature providing structured research evidence on the effects and possible benefits of massage therapy for PMR, that I can find, I am aware of two cases of PMR, one of which reportedly responded well to the relaxation effects of massage and the other where massage appeared to trigger the pain and stiffness symptoms. Through the case of a family member who has PMR, I know that at the time of dose reduction, there is period of adjustment to a lower dose and the reaction is sometimes a recurrence of the symptoms. Throughout the course of the condition, like other inflammatory conditions, there can be 'flare-ups' and therefore periods of acute inflammation, when massage would be contra-indicated. It is therefore vitally important that the therapist develops a good relationship with the client and understanding of how the condition affects them and is in this way aware of when massage might be indicated and when it is not the most appropriate treatment. Considerations for the Remedial Massage Therapist therefore include:-

- Client without diagnosis but with pain that has come on suddenly, especially in the shoulders: – at first the client might put the aches and pains down to having 'overdone' the gardening or 'just getting older'. The description of the onset and type of pain, location of pain and stiffness (shoulders, thighs and/or neck), age of the client, no relief from painkillers, severe morning stiffness (30 minutes to over 1 hour) that eases as the day goes on, pain and stiffness after rest or inactivity, together these are possible indicators of PMR and referral to the GP for blood tests is advisable. It is important to reiterate that many other conditions mimic PMR symptoms.
- Client with PMR who begins to experience severe headaches, pain at temples or over scalp, blurred vision and/or jaw pain – it is extremely important that they see the GP as soon as possible, to check for giant cell arteritis (temporal arteritis).

- Given what we know about the benefits of massage therapy in chronic conditions, it would seem that there are many aspects of PMR that might be improved with Advanced Remedial Massage, e.g. releasing muscle spasm; reducing pain; reducing inflammation; restoring structural balance; affecting the nervous system to encourage production of endorphins and stimulating the parasympathetic nervous system to encourage rest and repair; boosting the immune system; improving circulatory and respiratory systems to ensure a good supply of oxygen- and nutrient-rich blood to the cells, efficient venous return and lymphatic transportation of excess fluid, protein and waste products; improving joint mobility, and so on. It is thought that environmental factors might be part of the cause, and stress is an obvious example, so the relaxation effects of massage in general and increased awareness of the client should be of assistance in addressing the effects of stress on the condition. There are, however, reasons to be cautious:-
 - There is a wide variation in the severity of the condition and there may be many or few recurring episodes of the inflammatory symptoms, when massage would not be appropriate.
 - **Prolonged use of corticosteroids** carries the possibility of many side-effects, including weight increase, osteoporosis, easy bruising, indigestion, blood sugar level changes, muscle wasting, rounding of face, fluid retention and others. Also, while the dose is mainly administered orally, steroid injections are given to some PMR patients, this of course is a local contra-indication to massage. If giant cell arteritis is diagnosed, the treatment is a high dose of corticosteroids. There are more details of the side effects and adverse outcomes of steroid treatment for PMR and GCA on the Arthritis Research Campaign (ARC) website: – “*Risks of diabetes mellitus, vertebral, femoral neck and hip fractures are reported to be 2-5 times greater in patients with PMR on steroids...*” (ARC Topical Review). The combination of the effects of the symptoms of PMR, e.g. the effects of lack of mobility and inflammation on joints and bones and the osteoporotic side effects of corticosteroids is just one area for concern. In the book ‘*Mosby’s Fundamentals of Therapeutic Massage*, it notes as a caution [about steroids and massage] that because some massage techniques set up the inflammatory response and changes are caused in stress levels, this may have an effect on the dose and there are therefore implications for careful monitoring (and working with the client’s GP) if regular massage is to be used. In the ARC Information Booklet on ‘Complementary Therapies and Arthritis’, it notes, “*It is difficult to compare conventional medicine and complementary therapies. Most medical and other healthcare training institutions in the UK provide little instruction in complementary therapies. Similarly, most complementary therapy courses provide little training in conventional medicine. As a result, there are not many examples of complementary therapies and conventional medicine working together.*” The subject of steroids has to be a significant issue to be considered.
 - Any chronic condition where there is pain (and sleep patterns are broken), has psychological and emotional effects on an individual and careful thought and discussion with the client in relation to pain management will be required. In the family member case previously referred to, I know that breathing techniques, visualisation and relaxation techniques have proved to be effective in easing the pain of acute exacerbations of the condition. In managing the condition, the following have also proved to be beneficial in that case:- adequate exercise, adequate rest, pacing yourself, reorganising when and how activities are undertaken (e.g. instead of doing an activity in the morning when it takes a lot of energy and causes pain, reschedule to a later time when the stiffness has eased), maintaining a healthy diet (e.g. eliminating foods that can have an inflammatory effect). Other therapies such as reflexology, Alexander Technique, Bowen Technique, Aromatherapy, etc. may be beneficial. In letters to the ARC quarterly magazine “*Arthritis Today*”, there were two about PMR: – both recommended homeopathy as an effective treatment for PMR and GCA.

In conclusion, PMR is a more common condition than many might imagine. As I have described, it can be severely debilitating physically, mentally and emotionally. There is relatively little literature available, but new research is being undertaken into the possible causes. The diagnosis is difficult because of the similarity of symptoms of PMR and other conditions and this must be kept in mind. The lack of any solid research and evidence (including the Touch Research Institute, to whom I wrote) on PMR and touch therapies places extra emphasis on the necessity for the relationship and trust between therapist and client (and the client’s GP) to be good; any treatment plan must be holistic, tailored to the individual’s needs and condition and be directed by the nature, stage and progression of the condition as it affects that individual client at different times. It is clear however that there are many potentially beneficial courses of action and therapies that might be used to alleviate the symptoms of PMR and help to prevent or keep to a minimum the long-term damaging effects of the condition and the steroid treatment.

BIBLIOGRAPHY

- Arthritis Research Campaign (ARC) ‘An Information Booklet’ *Polymyalgia Rheumatica (PMR)*;
ARC ‘Topical Review’ *Polymyalgia Rheumatica and Giant Cell Arteritis* – www.arc.org.uk/about_arth/med_reports/series4/tr/6602/6602.htm;
ARC ‘News and Features’ *Complementary Therapies & Food Supplements* – www.arc.org.uk/newsviews/hints/compfood.htm;
ARC ‘An Information Booklet’ *Complementary Therapies And Arthritis* (available to download from site);
eMedicine ‘Polymyalgia’ – author *Ehab R Saad MD* – www.emedicine.com/med/topic1871.htm;
‘Health Information at your fingertips’ *Polymyalgia Rheumatica*’ – www.patient.co.uk;
National Institute of Arthritis and Musculoskeletal and Skin Diseases ‘Health Topics’ *Questions and Answers About Polymyalgia rheumatica and Giant Cell Arteritis* – www.niams.nih.gov/hi/topics/polymyalgia/index.htm;
‘Mosby’s Fundamentals of Therapeutic Massage’ – *Sandy Fritz*;
‘Polymyalgia Rheumatica’ www.mayoclinic.com;
SMS Dip Advanced Remedial Massage Therapy course notes;
Oxford Concise Medical Dictionary;
‘PMR’ www.netdoctor.co.uk/diseases/facts/polymyalgia.htm;
Touch Research Institute www.miami.edu/touch-research/index.html

Moira Watson has recently completed the Scottish Massage Schools' Advanced Remedial Massage Diploma course in Edinburgh. She is currently practising in Turriff in Remedial & Sports Massage, Aromatherapy, On-Site Massage and Indian Head Massage, and can be contacted on 07748 955922. Moira also recently received the Jim Potter Quaich for the Most Improved Student on her completion of the Advanced Remedial Massage diploma course in Edinburgh.