

Polymyalgia rheumatica

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ABSTRACT

This case presents a 68-year-old female patient who came to the health center with pain in the wrist and ankle joints. The patient was treated with simple analgesia; Avedon 1000mg 1x4 and topical Diclofenac gel. Despite taking the medication for 10 days the symptoms did not resolve and the patient re-attended to see the same physician. Her analgesia was optimized and she was given a further course of oral non steroidal anti-inflammatories for a further week. As her symptoms persisted, she attended to see me my clinic.

After further history taking, I discovered she had a 6 months history of joint pains and suspected Polymyalgia Rheumatica. I arranged for blood tests including inflammatory markers; C-reactive-protein (CRP) and Erythrocyte sedimentation rate (ESR). I commenced her on Prednisolone 20mg daily and advised her to attend for follow up in 2 weeks. **Keywords:** Polymyalgia rheumatica, pain, CRP,ESR

الملخص:

هذه الحالة تمثل احد المريضات بعمر ٦٨ سنه والتي راجعت المركز الطبي بسبب الالام المتكررة في المفاصل خاصه مفصلي الرسغ والكاحل .الطبيب المسؤول عن الحالة عالج المريضة بحبوب الالثيدرن ١٠٠٠ ملغ اربع حبات في اليوم ومرهم الديكلوفيناك .المريضة استخدمت العلاج لمدة ١٠ ايام واتت لمقابلة نفس الطبيب بعدها والذي وصف لها حبوب الديكلوفيناك •• ملغ حبتين في اليوم لمدة اسبو عين.المريضة اخذت العلاج امدة اسبوع وراجع عيادتي واخبرتني عن تاريخها المرضي مع التلم لمدة اكثر من ست شهور بعد مناقشه المريضة اخبرتها باحتمالية اصابتها بمرض اليولي ميالجيا ريوماتيكا .ارسلت المريضة لعمل الفحوصات الأولية مثل ال إي أس آر وال سي ار بي وفي نفس الوقت بدأت المريضة بالعلاج مع الپريدنزولون حبوب ٢٠ ملغم يوميا وحجز مراجعه للمتتابعة بعد اسبوعين. الكلمات المفتاحية: البولي ميالجيا ريوماتيكا. ألم، اختبارات إي أس آر وال سي ار بي ولي سي ار بي.



Introduction

Polymyalgia rheumatica typically affects people over the age of 65 and it is rarely seen in those under age 50. Patients present with muscle pain and stiffness which is worse in the morning and typically affects the shoulders and hips. Polymyalgia rheumatica has a female preponderance, with those people of Northern European and Scandinavian descent being at a higher risk for the condition.

Occasionally patients with polymyalgia rheumatica are also diagnosed with a related disorder called temporal arteritis. This condition causes inflammation of the blood vessels in the scalp, neck, and arms. Temporal arteritis can also cause headaches, jaw pain, and vision problems.¹

The symptoms of polymyalgia rheumatica can be like those of many other inflammatory conditions, including lupus and arthritis. To make an accurate diagnosis, a detailed physical examination should be conducted. During the exam, your doctor may gently move your neck, arms, and legs to evaluate your range of motion. If polymyalgia rheumatica is suspected, various blood tests may be advised to check for signs of inflammation in your body. These tests include-ESR (erythrocyte sedimentation rate), CRP (C-reactive protein levels). An abnormally high sedimentation rate and elevated C-reactive protein levels usually are suggestive of inflammation.²



<u>Case report</u>

A 64-year-old patient presented with a history of joint pains sometimes associated with a fever. Despite being seen twice over a course of a month, and being treated with simple analgesia, her symptoms persisted.

The third visit was the patient reported a fever, joint and upper limb pain, movement restriction, general weakness, and sleep disturbances due to the severity of pain.

Physical examination findings-The general condition was stable however she had a fever of 38.1° C. There was tenderness on palpation of shoulder joints and overlying muscles; the patient had grossly reduced range of movement due to severity of the pain. Cardiovascular and general systems examination were unremarkable.

Laboratory tests revealed:

RBCs-Erythrocytes 4.6×1012 /l,

Hemoglobin- 130 and 144 g/l,

TLC-leukocytes $7.9 \times 10.9 / 1, 6.5 \times 10.9 / 1,$

DLC-eosinophils, lymphocytes 38%, monocytes 5%,

Elevated ESR 80 mm/hr.

C-reactive protein 50 mg/l (normal range is up to 5),

Rheumatoid factor 10 IU/ml (normal range is up to 14),

Serum total protein 76 g/l, total cholesterol 5.1 mmol/l, urea 4.5 mmol/l, creatinine 0.055 mmol/l

Urinalysis-no significant abnormalities,



RA rheumatoid factors negative

Electrocardiography (ECG) values -No significant changes. Radiological examination of the shoulders, wrist joints: no pathology was detected.

Considering complaints, analysis of the disease, and all results of the final diagnosis of polymyalgia rheumatica was established.

The patient was treated with oral methylprednisolone 20mg/day as well as with pantoprazole.

Following the treatment, the patient's pain in the muscles and joints decreased, but did not resolve, the range of movements increased, and the inflammatory markers improved. The patient was reviewed regularly, and the initial follow up was after three days to check the patient clinically as well as checking the inflammatory markers. The steroid dose was tapered down after 4 weeks until the patient was taking a daily dose of 10mg, after which the dose was slowly discontinued.

Unfortunately, after the medication was stopped the patient represented with joint pain and was recommenced on Prednisolone 1.25 mg for six months. Her symptoms were controlled on this dose of medication.

Discussions

This case presentation demonstrates a classical example of Polymyalgia Rheumatica. The key features of PMR are joint pains, mainly in the proximal parts of limbs which is worse in the morning and is accompanied with a significant increase of acute phase parameters such as CRP and ESR.

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Relying on the clinical manifestations alone to diagnose the PMR may lead to diagnostic error. PMR often presents with vague symptoms of mild fever, malaise, loss of appetite leading to unexplained weight loss and depression.³ Morning stiffness and proximal pain are not enough to diagnose PMR as these symptoms are observed in many diseases.

In some cases, imaging may be needed to assess the inflammation in the joints and tissues. An ultrasound uses high-frequency sound waves to create detailed images of the soft tissue in different parts of the body. This can be very helpful in distinguishing polymyalgia rheumatica from other conditions that cause similar symptoms.⁴

The onset of PMR may be sudden, as described in this case study, while a long course and poor response to treatment may suggest other diagnoses.

Although there is no specific test for PMR inflammatory markers can be useful in making the diagnosis. If ESR and CRP are normal, it is unlikely that PMR will be diagnosed. As inflammation is a feature of many conditions, raised inflammatory markers may indicate other conditions. Further tests may be needed to help rule out other conditions that cause inflammation. For example, Rheumatoid factor and anti-CCP antibodies may be done to rule out rheumatoid arthritis ⁵

Several clinicians from their experience use the administration of corticosteroids as a diagnostic tool to diagnose PMR. However such an approach can be problematic as corticosteroids with pronounced anti-inflammatory properties may conceal the symptoms of many severe pathological conditions which include inflammatory and non-inflammatory rheumatic diseases, e.g. osteoarthritis, rheumatoid arthirits.⁶



Conclusions

Polymyalgia rheumatica is not a rare disease. The ageing population across the world means the numbers of PMR will also increase. In order to diagnose PMR, it is necessary to exclude other rheumatic diseases, infections (osteomyelitis, rheumatoid arthritis, etc.) and malignant neoplasms, especially in the group of patients at a very advanced age, with family history of cancer, with contact with infection or patients from endemic areas for specific infections.

Due to the sometimes-vague symptoms of PMR, patients can present to various specialties and so it is important that doctors from various fields are aware of the symptomatology of PMR. This will ensure an accurate and timely diagnosis, which will inevitably benefit the patient and their prognosis.

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