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GESTÃO DA POLIMIALGIA REUMÁTICA NOS CUIDADOS DE SAÚDE PRIMÁRIOS: UM CASO CLÍNICO ABRANGENTE
MANAGEMENT OF POLYMYALGIA RHEUMATICA IN THE PRIMARY HEALTH CARE SETTING: A COMPREHENSIVE CASE REPORT
GESTIÓN DE LA POLIMIALGIA REUMÁTICA EN ATENCIÓN PRIMARIA: UN INFORME DE CASO COMPLETO

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RESUMO

Introdução: Polimialgia Reumática (PMR) é uma doença inflamatória reumática de evolução sistémica do adulto, caracterizada por dor, rigidez matinal e um impacto negativo nas atividades da vida diária do doente.
Objetivo: Descrever de forma completa o caso de um doente complexo diagnosticado com PMR ao nível dos Cuidados de Saúde Primários (CSP).
Métodos: O relato de caso segue as diretrizes CARE, tendo sido obtido consentimento informado escrito do utente para a publicação do caso. Homem, 63 anos, com multimorbilidade, apresentou-se com história de dor ao nível da anca esquerda com duas semanas de evolução. Duas semanas depois, e após dois tratamentos farmacológicos sem sucesso, apresentava dificuldade na mobilização das articulações glenoumerais, rigidez articular escapular e pélvica matinal com pelo menos 30 minutos de duração e alterações analíticas sugestivas, sendo assumido o diagnóstico de PMR e iniciada terapêutica com corticoide.
Resultados: Os sintomas iniciais enquadram-se numa apresentação atípica de PMR, atrasando o diagnóstico. Foram necessários ajustes na terapêutica para diabetes mellitus, assim como a instituição de medidas profiláticas para a osteoporose induzida por corticoides.
Conclusão: Este caso clínico realça a importância de incluir a PMR no diagnóstico diferencial de dor articular, no contexto dos CSP. Demonstra o papel essencial da política de porta aberta que caracteriza os CSP para a abordagem de queixas álgicas inespecíficas e destaca a capacidade do Médico de Família para gerir doentes com multimorbilidade.

Palavras-chave: polimialgia reumática; multimorbilidade; cuidados de saúde primários; gestão da dor

ABSTRACT

Introduction: Polymyalgia Rheumatica (PMR) is a systemic inflammatory rheumatic disease of the adult, characterized by pain, morning stiffness, and a negative impact on daily activities.
Objective: To provide a comprehensive description of a clinical case of PMR in a complex patient within the Primary Health Care (PHC) setting.
Methods: This report follows the CARE guidelines, and appropriate patient consent was obtained. A 63-year-old male with multimorbidity presented with a two-week history of left hip pain. Two weeks later, and following two unsuccessful pharmacological treatments, he developed difficulty mobilizing the glenohumeral joints, along with morning stiffness in the shoulder and pelvic girdles lasting at least 30 minutes. Based on suggestive laboratory findings, a diagnosis of PMR was confirmed, and appropriate corticosteroid therapy was initiated.
Results: The initial symptoms represented an atypical presentation of PMR, leading to a delayed diagnosis. Adjustments to Diabetes Mellitus medication were required, as well as the implementation of prophylactic measures for corticosteroid-induced osteoporosis.
Conclusion: This case underscores the importance of considering PMR in the differential diagnosis of joint pain in the PHC setting. It demonstrates the essential role of the open-door policy characteristic of PHC in addressing non-specific pain complaints and highlights the Family Physician's expertise in managing patients with multimorbidity, including pain management.

Keywords: polymyalgia rheumatica; multimorbidity; primary health care; pain management

RESUMEN

Introducción: La Polimialgia Reumática (PMR) es una enfermedad inflamatória reumática de evolución sistémica en adultos, caracterizada por dolor, rigidez matutina y un impacto negativo en las actividades de la vida diaria del paciente.
Objetivo: Describir de manera completa el caso de un paciente complejo diagnosticado con PMR en el nivel de Atención Primaria de Salud (APS).
Métodos El reporte sigue las directrices CARE y se obtuvo el consentimiento informado por escrito del paciente para la publicación del caso. Hombre, 63 años, con multimorbilidad, que se presentó con una historia de dolor en la cadera izquierda con dos semanas de evolución. Dos semanas depués, y tras dos tratamientos farmacológicos fallidos, el paciente presentaba dificultad para movilizar las articulaciones glenohumerales, rigidez matutina en las cinturas escapular y pélvica de al menos 30 minutos de duración, y alteraciones analíticas sugestivas. Se asumió el diagnóstico de PMR y se inició tratamiento con corticoides.
Resultados: Los síntomas iniciales correspondieron a una presentación atípica de PMR, lo que retrasó el diagnóstico. Se realizaron ajustes en el tratamiento de la diabetes mellitus, así como la implementación de medidas profilácticas para la osteoporosis inducida por corticoides.
Conclusión: Este caso clínico resalta la importancia de incluir la PMR en el diagnóstico diferencial del dolor articular en el contexto de la APS. Demuestra el papel esencial de la política de puerta abierta de la APS en el abordaje de quejas dolorosas inespecíficas y la capacidad del médico de familia para gestionar pacientes con multimorbilidad.

Palabras clave: polimialgia reumática; multimorbilidad; atención primaria de salud; manejo del dolor

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INTRODUCTION

Pain is the most frequent symptom observed in adults, and it can comprise as much as two out of every five patient visits to a physician in Primary Health Care (PHC) (Mäntyselkä et al., 2001). Pain management is, therefore, one of the most important skills of the Family Physician. This clinical case aims to highlight, on one hand, a fundamental characteristic of PHC - providing adequate accessibility for patients with acute pain complaints, the so called open-door policy – and, on the other hand, to emphasize the Family Physician's ability to address a relatively rare cause of pain complaints – Polymyalgia Rheymatica (PMR) – from both diagnostic and therapeutic perspectives.

PMR is a systemic rheumatic inflammatory disease of adults, with an estimated prevalence in Portugal of only 0.1% (Branco JC et al., 2016). Regardless of age group, it affects women two to three times more often (Salvarani et al., 2002), and is characterized by pain and morning stiffness (Salvarani et al, 2004; Nesher, 2014; Kermani et al., 2013). It is not an erosive disease, causing no structural damage; however, it is highly debilitating due to its negative impact on daily life activities (Twohig et al., 2013). An association with Giant Cell Arteritis is found in 5 to 30% of cases (Salvarani et al., 1995; González-Gay et al., 1999; Gran et al., 2001).

Formal diagnostic criteria for PMR that are universally accepted have not yet been defined. There is, however, a provisional classification criterion for PMR that can be used in research studies from the European Alliance of Associations for Rheumatology (EULAR)/American College of Rheumatology (ACR) (Dasgupta et al., 2012). The diagnosis of PMR is a clinical one and is sustained on clinical presentation and exclusion of other diseases, like active infection or malignancy, requiring laboratory analysis and sometimes imaging (Espígol-Frigolé et al., 2023).

The onset of PMR usually involves a recent, slight change in musculoskeletal symptoms, or it can be sudden, almost developing overnight (Salvarani et al., 2004; Salvarini et al., 2008). Bilateral shoulder pain is the initial symptom in nearly all patients (70 to 95 percent), while the neck and hip girdle are affected in approximately 70 and 50 percent of cases, respectively (Muratore F., 2024). Pelvic girdle symptoms appear as pain in the groin and lateral hip areas, frequently radiating to the back of the thighs (Muratore F., 2024).

After diagnosis is made, the determination of comorbidities, such as hypertension, diabetes, cardiovascular disease, dyslipidemia, peptic ulcer, and osteoporosis (Dejaco et al., 2015), follows, which are taken into account in the initial therapeutic approach. This is usually based on glucocorticoids, and a treatment response in 2 to 4 weeks is expected (Espígol-Frigolé et al., 2023). After this period, a slow individualized tapering of the glucocorticoid is recommended (which can extend over 1 to 2 years (Espígol-Frigolé et al., 2023), providing that a correct assessment of disease activity is regularly made (Dejaco et al., 2015). It is crucial in this phase to distinguish disease activity from comorbidities and treatment-related side-effects (Dejaco et al., 2015).

As mentioned, the approach of PMR must consider the patient's comorbidities. Multimorbidity, the coexistence of two or more chronic conditions in the same individual (WHO, 2016), is extremely frequent, reaching a prevalence as high as 30% among people aged 45 to 64 years (Barnett et al., 2012; Fortin et al., 2012). Adding to the above-mentioned, this clinical case also aims to highlight another fundamental characteristic of PHC and expertise of the Family Physician – ensuring appropriate follow-up for patients with chronic conditions and multimorbidity.

To present this case report, appropriate patient consent was obtained, and CARE guidelines (Gagnier et al., 2013) were followed.

1. CASE PRESENTATION

We present the case of a 63-year-old Caucasian male, employed, married, belonging to a nuclear family, in Duvall life cycle stage VI, belonging to the lower-middle socioeconomic class, according to Graffar's classification. He has the medical history of Type 2 Diabetes Mellitus (T2DM), arterial hypertension, dyslipidemia, obesity, gout, thyroid nodules, cervical melanoma successfully removed with surgery, benign prostate hypertrophy, urge urinary incontinence, and mild bilateral coxarthrosis. He has no relevant family history and is medicated with ramipril 10 mg, amlodipine 5 mg, metformin 850 mg, dapagliflozin 5 mg, rosuvastatin 20 mg, ezetimibe 10 mg, allopurinol 300 mg, acetylsalicylic acid 100 mg, finasteride 5 mg, solifenacin 6 mg, and tamsulosin 0.4 mg.

The patient presented to our consultation complaining of pain in the left hip, graded 8 to 9 out of 10, progressing to the knee, more intense in the central part of the thigh, with two weeks of evolution, unrelated to exertion. The pain persisted despite self-medication with ibuprofen and nimesulide on demand.

On physical examination (PE), he presented with painful abduction of the left thigh against resistance and decreased range of motion in the hip joint. He had no signs of acute limb ischemia or venous thromboembolism. Given the symptoms and lack of clear clinical findings on the physical examination, bilateral knee and hip X-rays were requested, and the diagnosis of an acute tendinopathy superimposed on osteoarthritis was assumed. A cycle of naproxen 500 mg twice daily was prescribed and implemented, relative rest through the issuance of a Certificate of Temporary Incapacity for work.

One week later, the patient schedules a new consultation due to therapy failure, worsening pain in the left hip, the beginning of right leg pain, nighttime awakenings, and recent weight loss (8 kg in five months). There were no new changes to the PE. The patient was therefore medicated with a combination of dexketoprofen 75 mg with tramadol 25 mg, and an urgent analytical study was requested upon suspicion of cancer.

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In the meantime, during an ER visit because of aggravated pain, lumbar and hip X-rays were also done, which revealed clear osteophytosis mainly in the lower lumbar vertebrae and thickening of the anterior ligament, while the hip exam showed mild bilateral coxarthrosis with preservation of joint space width and regular shape of the femoral heads. The knee X-ray previously requested was normal.

The patient was re-evaluated at a scheduled appointment nine days later and presented new complaints: difficulty in mobilizing the glenohumeral joints, not being able to comb his hair, and morning stiffness in the shoulder and pelvic girdles lasting at least 30 minutes. Amaurosis, temporal headache, pain on temporal palpation, or complaints regarding the temporomandibular joint were denied. Analytically, he presented mild hypochromic normocytic anemia, mild leukocytosis with relative neutrophilia, increased ferritin, erythrocyte sedimentation rate, and ultrasensitive CRP, and protein electrophoresis with changes suggestive of inflammation (Table 1). The diagnosis of PMR was assumed to be highly probable, and therapy with 20 mg of prednisolone daily was instituted. The patient achieved pain control in two weeks. One month after starting therapy, there was a decrease in inflammatory parameters (Table 1), and so progressive weaning of corticosteroid therapy began until the minimum effective dose of 5 mg of prednisolone per day. Six months after diagnosis, the patient presented clinical and analytical (Table 1) remission of PMR, and was still dependent on corticosteroid therapy.

The patient's global perception of his health status progressively improved since the initiation of therapy; however, he felt that it never fully returned to its previous state. One of the reasons justifying this feeling was at the physical level: he was no longer able to tolerate prolonged moderate physical exertion as he had before. The other reason was at the emotional level: the patient was aware of pharmacological dependence for pain control, which he repeatedly expressed as a source of disappointment. At the social level, these limitations prevented him from resuming work and from engaging in light agricultural activities, which he had previously enjoyed.

Table 1 – Results of laboratory findings

	At the time of diagnosis	**4 weeks after therapy**	***6 months after therapy***
Red blood cell count	4.7 x10^{12}/L	----	4.15 x10^{12}/L
Hemoglobin	12.1 g/dL	----	14.2 g/dL
Hematocrit	38.9 %	----	41.2%
White blood cell count	12.2 x 10^3/mm3	----	7.7 x 10^3/mm3
Neutrophils	69.4%	----	57 %
Platelet count	282 x 10^3/mm3	----	254 x 10^3/mm3
Ferritin	252.7 ng/mL	----	----
Erythrocyte Sedimentation Rate	52 mm/hour	1.16 mm/hour	0.298 mm/hour
Ultrasensitive CRP	11.15 mg/dl	15 mg/dl	7 mg/dl
Total proteins	8 g/dL	----	----
Protein Electrophoresis		----	----
Albumin	47.6%	----	----
Alpha-1	7.9%	----	----
Alpha-2	13.5%	----	----
Beta	6.7%	----	----
Albumin-globulin relation	0.91	----	----
Creatinin	0.96 mg/dL	----	----
Uric acid	4.4 mg/dL	----	----
Lactate Dehydrogenase	166 UI/L	----	----
Aspartate aminotransferase	27 U/L	----	----
Alanine aminotransferase	14 U/L	----	----
Thyroid Stimulating Hormone	0.841 uUI/mL	----	----
Free T4	1.55 ug/dL	----	----
Glycated hemoglobin	6.4%	7.3%	6.9%

Note: M = average; T = total.

2. DISCUSSION

The first major challenge in this clinical case arose from the initial presentation of pain, which deviated from the classic presentation, and from the evolution of the pain complaints over time. This delayed the diagnosis of PMR, which was only confirmed one month after the onset of symptoms. Retrospectively, the initial symptoms fit a less typical presentation of PMR that begins in the pelvic girdle. It has been observed that a nonspecific clinical presentation can result in a delayed diagnosis, and it is not uncommon for some 3 of 5 patients to undergo evaluations for suspected malignancy before PMR is diagnosed (Salvarani et al., 2004; Lundberg et al., 2022), as occurred in this case. Atypical clinical presentations of PMR, such as the one presented in

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this case, have been reported in the literature (Neves et al., 2012). These reports may have the clinical implication of increasing physicians' level of diagnostic suspicion for this pathology, while never disregarding the fact that it is a diagnosis of exclusion.

The second challenge arose from the need to extend corticosteroid therapy for more than three months, necessitating the implementation of prophylactic measures for corticosteroid-induced osteoporosis as

advised by current clinical recommendations (Espígol-Frigolé et al., 2023). In addition to educating the patient on general measures such as physical exercise and fall prevention, daily supplementation with 1250 mg of calcium carbonate and 400 international units of cholecalciferol was initiated. T2DM control was compromised by the prolonged corticosteroid therapy (Table 1). Although there was a gradual decrease in the glycated hemoglobin with the tapering of corticosteroid therapy (Table 1), to achieve better control of T2DM, it was necessary to increase the metformin dose to 1000 mg.

Thirdly, it is important to highlight that the patient had preexisting osteoarticular pathology, specifically mild bilateral coxarthrosis. Pain management expectations had to be addressed in each consultation. Although it was possible to achieve symptomatic and analytical remission of the rheumatologic disease with low-dose prednisolone, the pain associated with coxarthrosis required management through physiotherapy.

All these challenges culminate in the need for close and sustained patient follow-up, which PHC aims to provide, not only for the assessment of new signs and symptoms, whether related or not to PMR, but also for the management of corticosteroid and analgesic therapy, their adverse effects, and, above all, to support the patient in coping with the socio-familial impact of the disease.

CONCLUSION

In conclusion, rheumatic disease in general, and PMR in specific, should be considered in the differential diagnosis of joint pain in the PHC setting. However, it is often necessary to adopt a watchful waiting approach for the emergence of new symptoms that can help narrow down the differential diagnosis. This requires the open-door policy that characterizes PHC.

PMR remains a condition surrounded by considerable uncertainty, encompassing aspects of its pathophysiology, diagnosis, and relapse prevention. The present case report illustrates these knowledge gaps and emphasizes the need for research directed toward early diagnosis and recognition of atypical disease presentations, with the ultimate aim of informing updated recommendations for the management of patients with osteoarticular pain.

Moreover, the Family Physician's expertise is crucial for the ongoing management of patients with multimorbidity, particularly during the development of acute conditions. Additionally, this expertise extends to the approach of chronic pain with multifactorial causes, as demonstrated in this case.

AUTHORS' CONTRIBUTION

Conceptualization, J.P., A.M. and R.F.; data curation, J.P., A.M. and R.F.; investigation, J.P., A.M. and R.F.; methodology, J.P., A.M. and R.F.; supervision, R.F.; supervision, R.F.; visualization, J.P., A.M. and R.F.; writing-original draft, J.P., A.M. and R.F.; writing-review & editing, J.P., A.M. and R.F.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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