

Polymyalgia rheumatica and giant cell arteritis

Polymyalgia rheumatica (PMR) is the second most common autoimmune rheumatic disease after rheumatoid arthritis, with a lifetime risk of 2.4% for women, and 1.7% for men. Giant cell arteritis (GCA), previously known as temporal arteritis, is a systemic vasculitis of arteries that typically affects the cranial arteries. GCA is a medical emergency because it can lead to ischemic optic neuropathy and irreversible vision loss. About 15% of people with PMR develop GCA, while about 50% people with GCA will have PMR. The presentation of both conditions can be vague, and diagnosis is therefore often delayed or missed in clinical practice.

TEACHING AND LEARNING AREAS



- Pathophysiology of PMR and GCA
- Key features on history, including likelihoods
- Differential diagnoses and discriminating features
- Appropriate investigations, including tests to exclude common mimics
- Management of PMR and GCA in primary care, including monitoring and managing side effects of corticosteroids
- Referral pathways, including process for urgent referral for temporal artery biopsy and rheumatological review

PRE-SESSION ACTIVITIES

- Read [2014 AFP Polymyalgia rheumatica: clinical update](#)

TEACHING TIPS AND TRAPS



- The hallmark of PMR is shoulder and hip girdle pain and stiffness
- Diagnosis of PMR is based on clinical presentation and elevated inflammatory markers, but up to 20% of patients have a normal ESR at diagnosis
- While imaging is not routinely required to diagnose PMR, ultrasound findings of subacromial bursitis or trochanteric bursitis are common
- Temporal artery tenderness or enlargement has a low diagnostic sensitivity in GCA as it occurs in only about 50% of cases
- Rapid response to corticosteroid therapy is a good diagnostic indicator of polymyalgia rheumatica but does not always occur
- If there is a strong clinical suspicion of GCA, high dose corticosteroid treatment should be started immediately without waiting for histological confirmation on arterial biopsy
- A negative temporal artery biopsy does not exclude a diagnosis of GCA
- There is evidence for the efficacy of methotrexate and tocilizumab, a monoclonal antibody, in the treatment of GCA

RESOURCES



- Read**
- NCBI StatPearls [Temporal arteritis](#)
 - Therapeutic guidelines chapter on PMR/GCA

FOLLOW UP/ EXTENSION ACTIVITIES

- Registrar to undertake clinical reasoning challenge and discuss with supervisor

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Clinical Reasoning Challenge

Greg is a 73 year old retired architect who presents to you with a history of 'rheumatics' for the past 5-6 weeks. He tells you that he feels 'stiff and sore' in the mornings, especially in his shoulders and hips, and sometimes struggles to get out of bed. He denies any precipitating illness or activity.

Greg is usually fit and well, with no significant PMHx. He is on no regular medications. He is a non-smoker and drinks 60g alcohol/week.

You suspect polymyalgia rheumatica.

QUESTION 1. What is the differential diagnosis of Greg's symptoms? List as many as appropriate.

QUESTION 2. What are the MOST IMPORTANT additional features on history to exclude other causes of his symptoms? List up to FOUR.

1

2

3

4

QUESTION 3. Further history is unremarkable, and you remain suspicious of a diagnosis of PMR. What is the single MOST IMPORTANT investigation to request at this point? List ONE investigation.

1

QUESTION 4. You manage Greg appropriately. Greg presents to you 2 weeks later as an emergency appointment. He complains of feeling 'awful', with malaise and a severe headache. He has temporal artery tenderness on the left side. What are the MOST IMPORTANT next steps in management? List as many as appropriate.

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ANSWERS

QUESTION 1

What is the differential diagnosis of Greg's symptoms? List as many as appropriate.

- Rheumatoid arthritis
- Spondyloarthropathy
- SLE
- Dermatomyositis/polymyositis
- Osteoarthritis
- Infections e.g. viral, SBE, TB
- Fibromyalgia
- Depression
- Thyroid disease
- Malignancy e.g. myelodysplasia

QUESTION 2

What are the MOST IMPORTANT additional features on history to exclude other causes of his symptoms? List up to FOUR.

- Significant weight loss
- Fevers
- Distal joint symptoms
- Rash
- Bone pain

QUESTION 3

Further history is unremarkable, and you remain suspicious of a diagnosis of PMR. What is the single MOST IMPORTANT investigation to request at this point? List ONE investigation.

- ESR or CRP

QUESTION 4

You manage Greg appropriately. Greg presents to you 2 weeks later as an emergency appointment. He complains of feeling 'awful', with malaise and a severe headache. He has temporal artery tenderness on the left side. What are the MOST IMPORTANT next steps in management? List as many as appropriate.

- Commence high dose corticosteroids
- Arrange temporal artery biopsy
- Commence aspirin
- Urgent referral to rheumatologist