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INVITED REVIEW

Polymyalgia rheumatica: When co-present with Giant cell arteritis, when not?

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In fact, to answer this question in one sentence, we can say, "*It is not clear.*" The term interrelated diseases can be used for Polymyalgia rheumatica (PMR) and Giant cell arteritis (GCA) [1]. The relationship between GCA and PMR can be compared to the associations between Systemic lupus erythematosus/Antiphospholipid syndrome, Rheumatoid arthritis/ Sjogren's syndrome, or Psoriatic arthritis/Gut disease. Socially, I can define these PMR and GCA as "*Two diseases that will make you famous*" for young physicians.

We can evaluate these two diseases in separate categories as isolated PMR, GCA seen in PMR, isolated GCA, PMR accompanying GCA, and GCA affecting large vessels [2].

When GCA is diagnosed, 40-60% have PMR symptoms, while 15-21% of PMR patients have GCA. Subclinical GCA may be detected in some PMR cases. However, since most of those who underwent temporal artery biopsy were patients with GCA symptoms, this rate is unknown in unselected cases [1,3].

Differences and similar features between PMR and GCA are summarized in Table 1 and 2.

Is PMR a limited or early form of GCA? Is PMR a type of vasculitis? Is PMR an auto-immune disease or an autoinflammatory disease?

There is no "*it*" supplement in the name of PMR, findings such as thrombosis, ischemia, and bleeding that we see in vasculitis are very rare, and PMR is not mentioned in the Chapel Hill classification for these reasons, PMR is not considered a primary vasculitis. In terms of auto-immune diseases, the presence of advanced age, the absence of a serological marker, the background of synovitis and its inability to accompany other autoimmune diseases also distract from the classification of autoimmune diseases. In terms of autoinflammatory diseases, advanced age, lack of course in the form of attacks, and the fact that there are constantly very high acute phase reactants also take away from this group [4].

Is there a need for GCA review in all PMR cases?

A difficult question. If we consider that one of the five PMR cases may have GCA, we can say "*yes*" to this question. Still, since this rate is unknown in unselected cases, unnecessary high dose steroid usage may increase, so the patient should be evaluated and decided on a case basis. On the other hand, insufficient steroid dosage may be raised if no investigation is done in patients with symptoms. As imaging methods other than temporal artery biopsy develop, more accurate answers will be given to this question. After PMR treatment is started, close follow-up is required in terms of headache, fatigue in the jaw, tongue, persistent fever, and eye symptoms. In terms of aortitis, it is necessary to investigate GCA in back pain, leg pain, and increased acute phase reactants. PMR symptoms have been more common in recent years, especially in GCA, affecting large vessels, which affects the aorta [4,5].

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Note:
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Table 1. Differences between PMR and GCA

PMR	GCA
Shoulder and hip pain	Headache
Movement limitation	Eye involvement
Morning stiffness	Tongue and jaw claudication
Low grade fever	Scalp tenderness
	Fever

Table 2. Common findings of PMR and GCA

Female
Advanced age
Fatique
Weight loss
Fever
Depression

The differences between the cranial form of GCA and the large vascular involvement form are summarized in Table 3.

Table 3. The differences between the predominant cranial form and large vessel involvement form

	Predominant cranial	Predominant LVV
Age at disease onset	65-85 years	50-70 years
Delay to diagnosis	+	++
Constitutional symptoms	++	+++
Cranial ischaemic manifestations	+++	+
Positive temporal artery biopsy	++	+/-
Visual ischaemic complications	+/++	+/-
Polymyalgia rheumatica	++	++/+++
Intermittent limb claudication	+/-	+
Relapses	+/++	++
Glucocorticoid therapy: longer	++	+++

LVV: Large Vessel Vasculitis

As a result, the answer to the question of when PMR is with GCA when is not clear today. Symptoms should be evaluated on a case basis. There are differences between these two diseases regarding the course, prognosis and corticosteroid dosages. Especially in cases with PMR, after treatment begins, the risk of GCA development needs close follow-up.

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