How does age influence the clinical features of patients with giant cell arteritis?

RESEARCH TEAM

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ABTRACT

Giant cell arteritis (GCA) is the most common form of primary systemic vasculitis affecting patients aged ≥ 50 years. It involves large- and medium-sized arteries. The most common manifestations of GCA are new-onset headache, accompanied by constitutional features, jaw claudication, visual disturbances and increased inflammatory markers. Polymyalgia rheumatica (PMR)-like symptoms such as pain and stiffness of the neck, shoulder and pelvic girdles may also occur in around 30-60% of patients. If left untreated, GCA can lead to permanent visual loss and other ischemic complications in up to 20% of patients, thus prompt recognition of the disease and an aggressive therapeutic approach are fundamental.

Age is a well-known factor for GCA's incidence with the likelihood of being diagnosed with this disease continuously increasing with age. More recently, it has been studied whether age can also influence the clinical features and prognosis of GCA. A case control study showed that GCA, in patients over 85 years old, had higher rates of severe ischemic complications and an increased risk for early death compared to younger patients. These results are, however, conflicting with the results

of a previous study conducted in 2007 in which younger patients (<70) had more frequently PMR-like symptoms, cerebrovascular accidents and large artery stenosis. A longer delay in diagnosis was surprisingly observed in patients under 70 years old compared to older patients. Moreover, large-vessel involvement and a more refractory disease course have also been more commonly reported in younger patients with large-vessel vasculitis (LVV) than in older patients with LVV.

The new 2022 ACR-EULAR classification criteria for LVV include for the first-time age as a mandatory entry criterion. Now, patients can only be classified as having GCA if aged ≥ 50 years, and as having Takayasu's arteritis (TAK) if aged ≤ 60 years. Hence, patients diagnosed between 50-60 years may present with features suggestive of both vasculitis, which should be recognized by the clinicians as it may have treatment implications.

Considering the wide clinical spectrum and the potential complications of GCA, understanding early predictors of worse prognosis and different clinical spectrums can be useful in a daily clinical setting. This study aims to increase this understanding of GCA by describing the Portuguese GCA cohort, comparing the clinical profile of patients diagnosed at <70 years old with those of patients diagnosed at an older age. The ideal cutting point would be 60 years of age, as explained beforehand; however, exploratory research was done within Reuma.pt and there seems to be a rather small group of patients diagnosed under 60 years, decreasing the likelihood of significant findings within our work. Other age intervals will also be explored. Understanding how age can affect GCA's clinical picture and prognosis can be a readily available, valuable tool to predict patients who will require closer follow-up or even earlier glucocorticoid-sparing therapeutic options, such as methotrexate or tocilizumab.