



Stroke Associated with Giant Cell Arteritis

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Article Info	ABSTRACT
Article type: Original article	Background and Aim: Giant cell arteritis (GCA) is the most common vasculitis in people ≥ 50 years and can be associated with stroke. The involvement of large vessels, especially the carotid branches, explains the predominantly cranial symptoms such as headache, scalp tenderness, temporal artery stiffness, and jaw claudication. Cerebrovascular accidents (CVA) have been described in the GCA context and may occur at disease onset in 2.8% to 7.2% of patients. In contrast to the usually well-recognized cranial and ophthalmic signs of GCA caused by the ischemia in external and internal carotid arteries territory, respectively, GCA-related stroke may be more widely attributed to vertebrobasilar artery involvement.
Article History: Received: 20 January 2020 Revised: 04 March 2020 Accepted: 14 May 2020	Results: The incidence rates of GCA-related stroke is from 3% to 7%. There is a close correlation between stroke and ophthalmic ischemic impairment, which is the most powerful predictive factor of stroke. While ophthalmic ischemic symptoms are common and may concern 15% to 49% of patients with GCA at diagnosis, CVA is quite rare at diagnosis and may affect 2% to 7.5% of patients. GCA-related cerebral ischemic events are more likely to affect the vertebrobasilar territory (75% of patients). Overall, in the context of new GCA diagnosis, the occurrence of stroke is more likely to be linked to vasculitis as opposed to thromboembolic or cardioembolic disease. Male sex, HTN, history of ischemic heart disease, smoking, and previous cranial ischemic manifestations have also been linked with a higher risk of cerebrovascular events. Patients with GCA-related ischemic events showed less frequent constitutional symptoms, lower levels of inflammatory variables, and higher hemoglobin levels than patients without ischemic events. We also found lower inflammatory variables and less anemia among our stroke patients. This is consistent with reduced levels of interleukin 6 (IL-6), a key cytokine in GCA pathogenesis, in cases of GCA-related ischemic symptoms. Conclusion: Stroke is a rare and severe ischemic complication that may develop in patients with recently diagnosed GCA. GCA-related stroke has a high mortality rate (28% of patients). It is more likely to occur in the vertebrobasilar territory and in patients who experience ophthalmic ischemic symptoms with low inflammatory variables. Treatment relies on GC and at least longterm antiplatelet agents, because stroke can occur within a few days or weeks of GC onset.