

FIVE THINGS TO KNOW ABOUT ...

Giant cell arteritis

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See related practice article by Zwicker and colleagues, available at www.cmaj.ca**Giant cell arteritis is a systemic disease**

Permanent, severe loss of vision is a feared complication; however, it is not the sole possible devastating outcome of giant cell arteritis. Myocardial infarction, ischemic stroke and limb gangrene may also occur. Thoracic aortic aneurysms are seen over 17 times more often in patients with giant cell arteritis than in age-matched controls.¹

The diagnosis of giant cell arteritis is ultimately based on clinical features

A thorough history is the most important component of diagnosis. High clinical suspicion can trump a negative biopsy. Neck pain and claudication of the jaw are most suggestive of giant cell arteritis.² Headache and myalgia are common symptoms but are less helpful in establishing a diagnosis. (Appendix 1, available at www.cmaj.ca/cgi/content/full/cmaj.100920/DC1, highlights the likelihood of diagnosing giant cell arteritis based on several key features.)

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The optimal work-up includes erythrocyte sedimentation rate, C-reactive protein level and platelet count

C-reactive protein level and platelet count have value in addition to the erythrocyte sedimentation rate. Simultaneous elevation of erythrocyte sedimentation rate and C-reactive protein level has a sensitivity of 88% and a specificity of 98%.² An elevated platelet count has a specificity of 91%, but a low sensitivity of only 57%.³

Loss of vision can occur despite treatment with oral prednisone

Progressive loss of vision may occur despite immediate initiation of high doses of oral prednisone (60–100 mg or about 1 mg/kg).⁵ In these instances, switching to intravenous corticosteroid treatment (e.g., 250 mg of methylprednisolone four times daily) for three days is a common practice. Retrospective studies suggest that adding acetylsalicylic acid may reduce the ischemic complications of giant cell arteritis.⁶

Biopsy of the temporal artery may be negative

Biopsy of the temporal artery is the main diagnostic tool, but is not without limitations. Granulomatous inflammation is often patchy, and histopathological changes may not be seen in biopsy specimens of insufficient length. Some institutions routinely perform bilateral biopsies to improve the yield. High-resolution magnetic resonance imaging is an emerging diagnostic tool that may prove useful alone or as an adjunct to guide biopsy in challenging cases.⁴

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Competing interests: None declared.

This article has been peer reviewed.

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CMAJ 2011. DOI:10.1503/cmaj.100920