

## Giant Cell Arteritis Presenting with Bilateral Axillary Artery Occlusions, Vertebral Artery Stenosis and Left Internal Mammary Artery Graft Stenosis

Rashmi Sharma MD

*Lehigh Valley Health Network, Rashmi.Sharma@lvhn.org*

J Patrick Kleaveland MD

*Lehigh Valley Health Network, J\_Patrick.Kleaveland@lvhn.org*

Marie S. O'Brien DO

*Lehigh Valley Health Network, Marie\_S.O'Brien@lvhn.org*

Follow this and additional works at: <https://scholarlyworks.lvhn.org/medicine>



Part of the [Cardiology Commons](#), and the [Medical Sciences Commons](#)

### Let us know how access to this document benefits you

---

#### Published In/Presented At

Sharma, R., Kleaveland, J., O'Brien, M. (2011). *Giant cell arteritis presenting with bilateral axillary artery occlusions, vertebral artery stenosis and left internal mammary artery graft stenosis*. Poster presentation.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact [LibraryServices@lvhn.org](mailto:LibraryServices@lvhn.org).



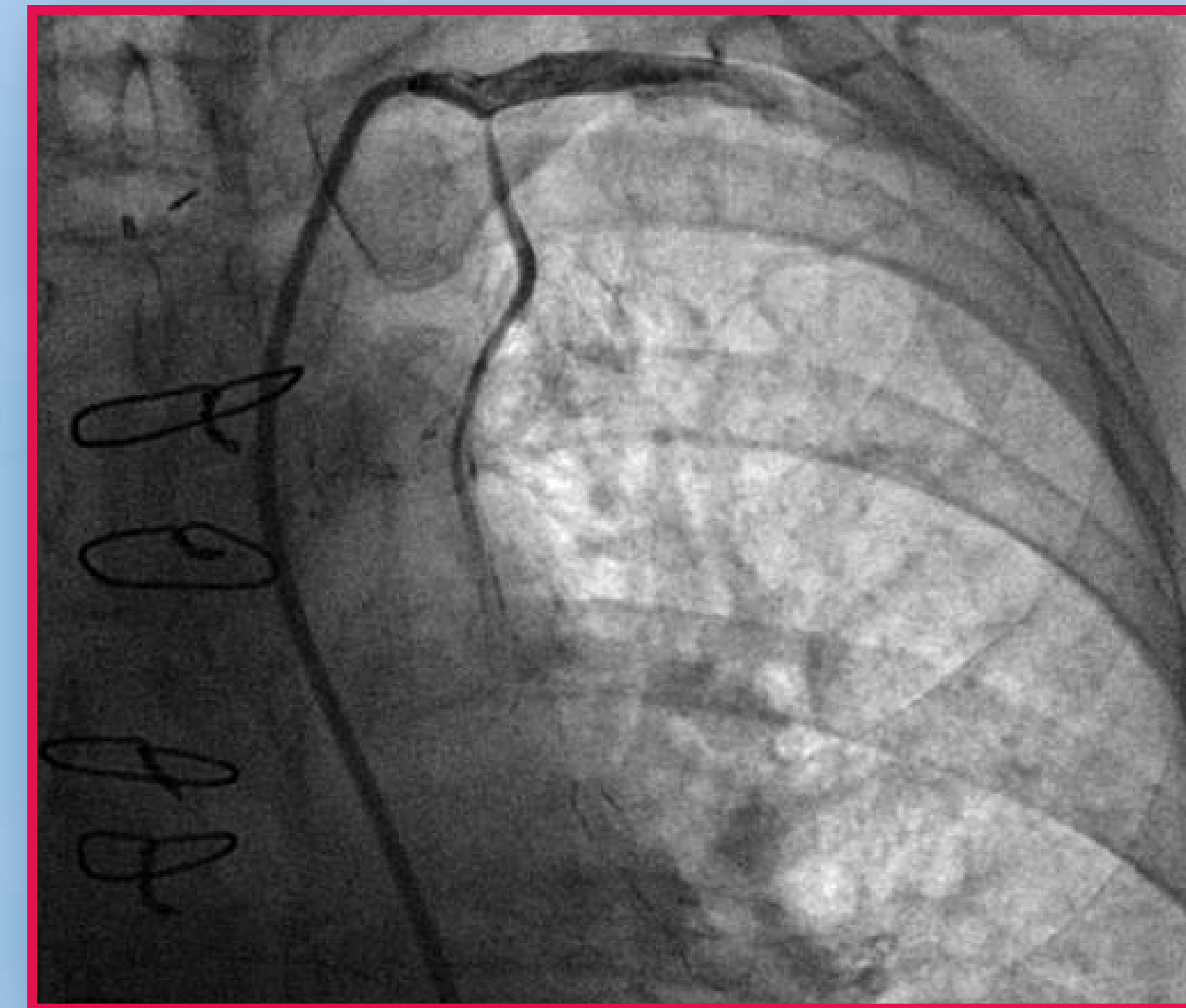
# Giant Cell Arteritis Presenting with Bilateral Axillary Artery Occlusions, Vertebral Artery Stenosis and Left Internal Mammary Artery Graft Stenosis

Rashmi Sharma M.D., J. Patrick Kleaveland M.D., Marie S. O'Brien DO, Lehigh Valley Health Network, Allentown, Pa.

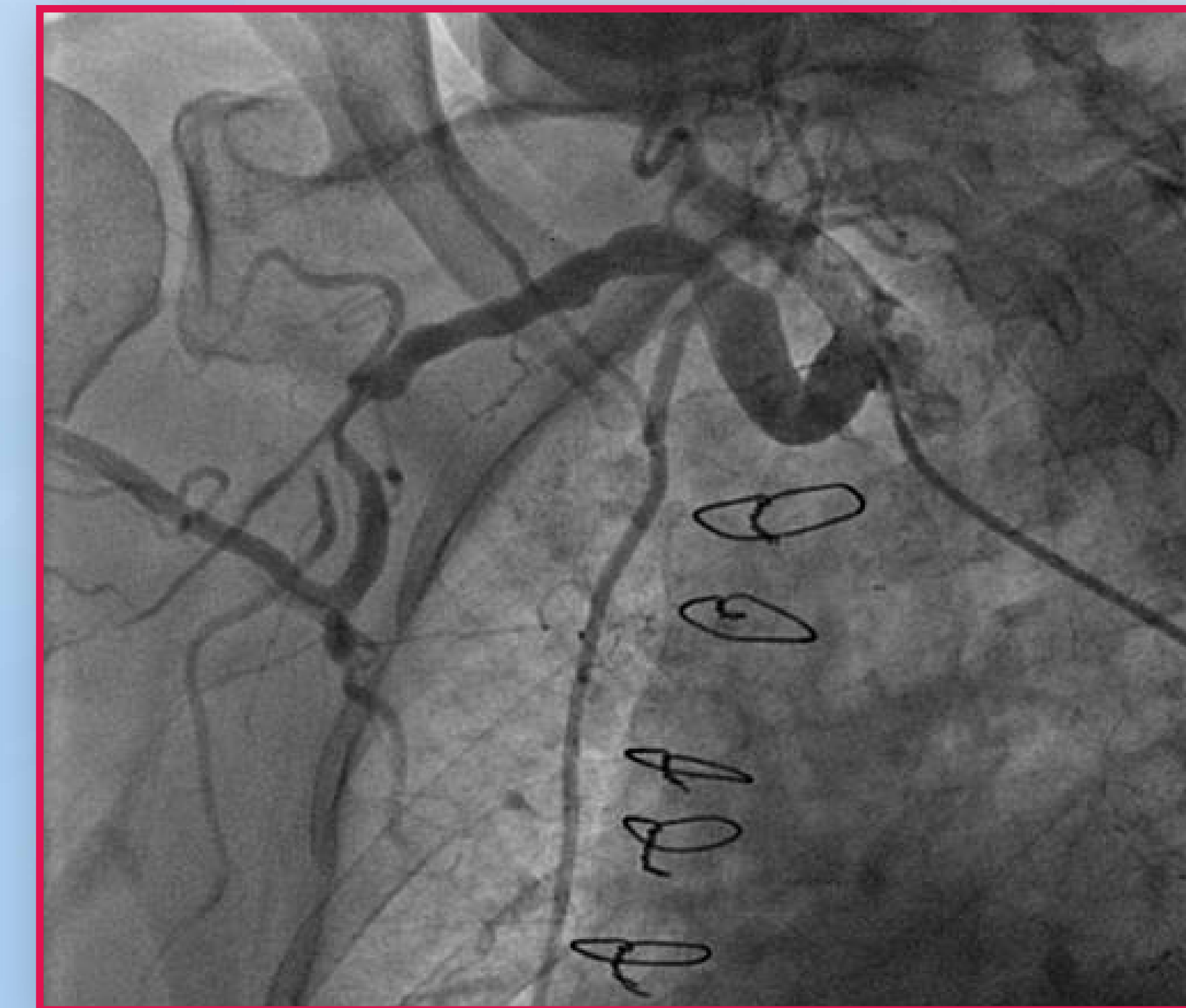
## Introduction

Giant cell arteritis (GCA) is the most common vasculitis of large and medium-sized arteries.<sup>1</sup> GCA was believed to be primarily a disease of cranial arteries, particularly the temporal and arteries of the retina and optic nerve.<sup>1</sup> Extra-cranial GCA has been reported in the aortic arch, subclavian and axillary arteries.<sup>1</sup> A marked elevated erythrocyte sedimentation rate (ESR) is typical however a normal or low ESR does not exclude GCA.<sup>1</sup>

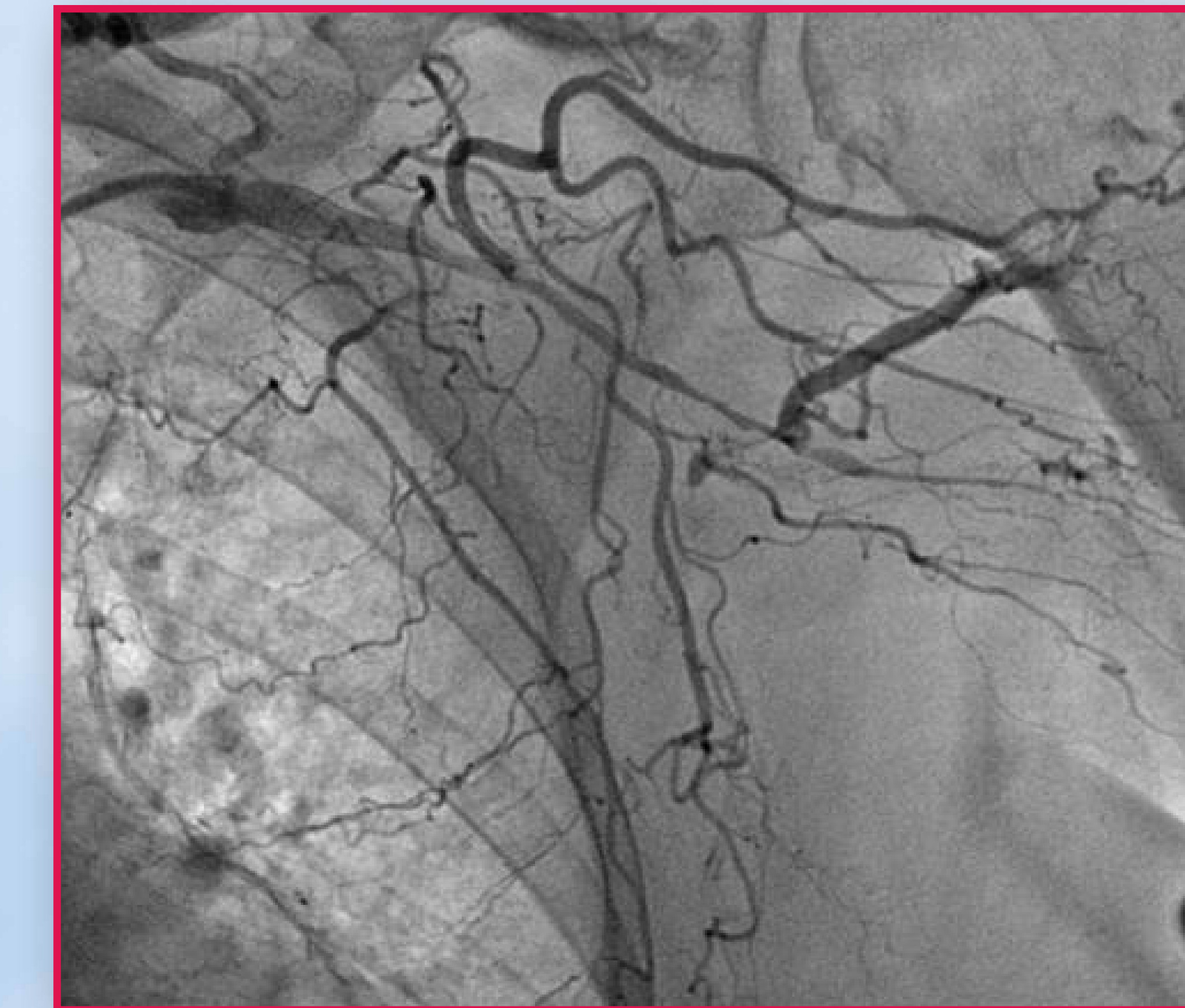
There have been reports of many atypical presentations of GCA<sup>2</sup> but involvement of bilateral axillary artery, vertebral artery and coronary artery graft all together has not been reported.



Left Internal Mammary Artery Graft Stenosis



Right Axillary Artery Occlusion



Left Axillary Artery Occlusion

## Case report

A 71 year old female presented with right facial and hand numbness. Her symptoms resolved yet brain MRA showed moderate to severe stenosis of distal dominant left vertebral artery. Two months later she developed pain and color changes in her hands. Past history revealed severe mitral stenosis s/p mitral valve replacement and CABG in 2000 with left internal mammary artery (LIMA) graft to the LAD. Cardiac catheterization for evaluation of hypotension and bilateral arm pain demonstrated 60 % stenosis of proximal LAD (unchanged from 2000), new 60% stenosis of RCA and circumflex marginal. There were sub-total occlusions (>90%) of both axillary arteries and 85% stenosis of the LIMA graft origin.

Rheumatology and vascular surgery consultations suggested GCA. She received prednisone 60 mg daily and within one week had bilateral temporal artery biopsies revealing recognizable lymphoid aggregates in the adventitia. One week later ESR was down from 39 to 2 and CRP 4.6 to 0.5. Her arm pain improved. Vascular intervention was deferred to prevent vessel rupture secondary to acute arteritis.

## Discussion

Despite reports of more deaths in patients with coronary artery GCA<sup>2</sup> it is rarely reported in practice of cardiology<sup>3</sup> and is an under recognized manifestation.<sup>4</sup> In this patient, CAD was likely due to progression of atherosclerosis, but the LIMA graft stenosis was caused by GCA. It is critical to diagnose GCA involvement of coronary arteries and bypass grafts early, so that treatment is initiated quickly and life-threatening complications can be prevented. Surgical intervention should be postponed until inflammatory activity in GCA is in remission following steroid therapy.

## Reference

- <sup>1</sup> Federico Tatò, Ulrich Hoffmann. Giant cell arteritis: a systemic vascular disease. *Vascular medicine* 2008;13:127-140
- <sup>2</sup> Tsapatsaris NP. Temporal arteritis. General review with emphasis on atypical manifestations and cardiovascular complications. *Cardiol Clin* 1991; 9:547-53.
- <sup>3</sup> Pérsio Godoy; Stanley de Almeida Araújo; Eduardo Paulino Júnior; Marco Aurélio Lana-Peixoto Coronary giant cell arteritis and acute myocardial infarction. *Cardiol.* vol. 88 Apr. 2007
- <sup>4</sup> Christopher R. Morris, MD, Jeffrey S. Scheib, MD. Fatal Myocardial Infarction Resulting From Coronary Arteritis in a Patient With Polymyalgia Rheumatica and Biopsy-Proved Temporal Arteritis. *Arch Intern Med.* 1994; 154:1158-1160.