

**Clinical Image**

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**Takayasu's arteritis diagnosed by carotid artery doppler****N Balamurugan, MD<sup>1</sup>; U Amaravathi, MD<sup>2</sup>; Swetha Ramesh, MBBS<sup>3</sup>**<sup>1</sup>Assistant Professor, Department of Emergency Medicine, JIPMER, Pondicherry, India.<sup>2</sup>Senior Resident, Department of Emergency Medicine, JIPMER, Pondicherry, India.<sup>3</sup>Junior Resident, Department of Emergency Medicine, JIPMER, Pondicherry, India.**\*Corresponding Author: Swetha Ramesh**

Junior Resident, Department of Emergency Medicine, JIPMER, Pondicherry- 605006, India.

Phone: +91-910-860-9203

Email: swetharamesh710@gmail.com

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**Description**

TA is a large vessel vasculitis involving mainly the aorta and its primary branches resulting in segmental stenosis, occlusion or aneurysms [1]. Angiography is the gold standard for diagnosing TA but may miss wall changes in the early stages of disease [1]. So bedside ultrasonography can serve as a valuable tool in ED for diagnosing early TA. The role of B mode ultrasound for detection of arterial thickening and follow up of patients is supported by previous studies [2].

We report a case of a 27 years old female with no prior comorbidities who presented to the emergency department (ED) with complaints of gradual painless decline in her vision for three months. There was no history of trauma, fever, diplopia or headache. Her visual acuity was 20/100 in right eye and 20/200 in left eye. While assessing the vitals her upper limb pulses were not palpable. A thorough examination then revealed that she didn't have bilateral carotid and upper limb pulses whereas all lower limb pulses were palpable. Ultrasound of her right common carotid artery showed Macaroni sign (Figure 1).



**Figure 1:** Description: Ultrasound of her common carotid arteries showed smooth, homogenous, circumferential, echogenic wall thickening with stenosis (left > right).



**Figure 2:** Description: CT angiography showed aortitis in the arch of aorta and its branches suggestive of TA

Ultrasound of her common carotid arteries showed smooth, homogenous, circumferential, echogenic wall thickening with stenosis (left > right). This finding, pathognomonic of Takayasu's arteritis (TA), is the eponymous Macaroni Sign [3]. Fundus fluorescein angiography revealed neovascularization of disc with extensive microaneurysms in both eyes. CT angiography showed aortitis in the arch of aorta and its branches suggestive of TA (Figure 2). She underwent pan retinal photocoagulation and was started on steroids and is doing better.

### References

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