Takayasu's Pulseless Disease

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FIG. 1 Ultrasound scan of the internal carotid artery demonstrating marked thickening of the arterial walls.

A 32-year-old woman presented with a 4-week history of recurrent dizziness. Clinical examination revealed absent upper limb and right carotid pulses. Blood pressure was 90/62 mmHg in the right arm and was unrecordable in the left arm. The lower limb pulses were normal and the left carotid pulse was palpable, with a loud bruit. Cardiac and neurological ex-

aminations were otherwise normal. The erythrocyte sedimentation rate (ESR) was modestly elevated at 30 mm/h.

Doppler ultrasound demonstrated marked thickening of the walls of both internal carotid arteries (Fig. 1), with bilateral carotid stenoses, and magnetic resonance imaging revealed thickening of the aortic arch extending into both common carotid arteries, with near obliteration of the right carotid artery and both subclavian arteries (Fig. 2). The features were consistent with Takayasu's disease and the patient was initially treated with oral prednisolone (60 mg daily) and aspirin (150 mg daily). Her symptoms of dizziness improved, the ESR returned to normal (5 mm/h), and she is now maintained on low-dose prednisolone (5 mg daily).

Takayasu's arteritis is a granulomatous disease that leads to a vasculitis predominately affecting the aorta and its branches, typically in a segmental distribution. Aortic root involvement may lead to aortic incompetence, while carotid disease may lead to cerebral ischemia or infarction. The inflammatory process involves the media and intima along with the adventitial layers of the arterial wall.

Carotid ultrasound is an effective method of identifying thickened carotid walls and allows assessment of the degree of

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FIG. 2 Magnetic resonance imaging of the aorta and its major proximal branches. There is thickening of the aortic arch that extends into both common carotid arteries (A), with almost complete obliteration of the right carotid artery and both subclavian arteries (B).

carotid stenosis. Magnetic resonance imaging allows accurate noninvasive assessment of the distribution and severity of the disease in the aorta and its branches, potentially avoiding the need for invasive assessment (aortogram or angiogram).

Reference

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