A 27-year-old Japanese woman with low-activity ulcerative colitis (UC) treated with mesalazine (2,400 mg/day) presented to hospital with fever and left-sided neck pain. On admission, her serum levels of C-reactive protein and erythrocyte sedimentation rate were elevated (5.82 mg/dL and 87 mm/h, respectively). Serotyping for human leucocyte antigen (HLA)-B52 was positive. Contrast-enhanced computed tomography (CE-CT) revealed an aneurysm in the left common carotid artery (Figure A). In addition, magnetic resonance imaging (MRI) revealed mural enhancement in the bilateral common carotid arteries (Figure B). These findings strongly suggested arteritis. However, although MRI demonstrated wall thickening in the right common carotid artery, morphometric assessment of the aneurysm remained incomplete. Carotid ultrasonography was performed to assess the morphology of the left carotid artery aneurysm, which revealed a wall thickness in the left carotid artery similar to that seen in the right carotid artery. Interestingly, part of the vessel wall of the aneurysm showed thinning (Figure C, D).

The patient was diagnosed with Takayasu arteritis (TAK) associated with UC. After stent placement to avoid aneurysmal rupture, she was treated with prednisolone (60 mg/day) and golimumab (50 mg/month), which improved the thickening of the blood vessels.

Ultrasonography including carotid ultrasonography has been used for the diagnosis and management of TAK. However, its usefulness in diagnosing aneurysms associated with TAK has not been established. CT angiography and MR angiography are generally useful for evaluation of carotid aneurysms. Thus, ultrasonography can be performed as a complementary imaging method to CT angiography and MR angiography when treating patients with carotid aneurysms.

**Disclosures**

The authors have no conflicts of interest. M.Y. is a member of Circulation Journal's Editorial Team.

**IRB Information**

Yamaguchi University Hospital does not require ethical approval for individual cases.

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**Figure.** (A) Contrast-enhanced computed tomography showing left common carotid artery aneurysm (arrow). (B) Magnetic resonance imaging on T2 sequence showing mural enhancement in bilateral common carotid arteries (arrows). (C,D) Carotid ultrasonography showing not only wall thickening but also wall thinning (arrows) of the aneurysm.