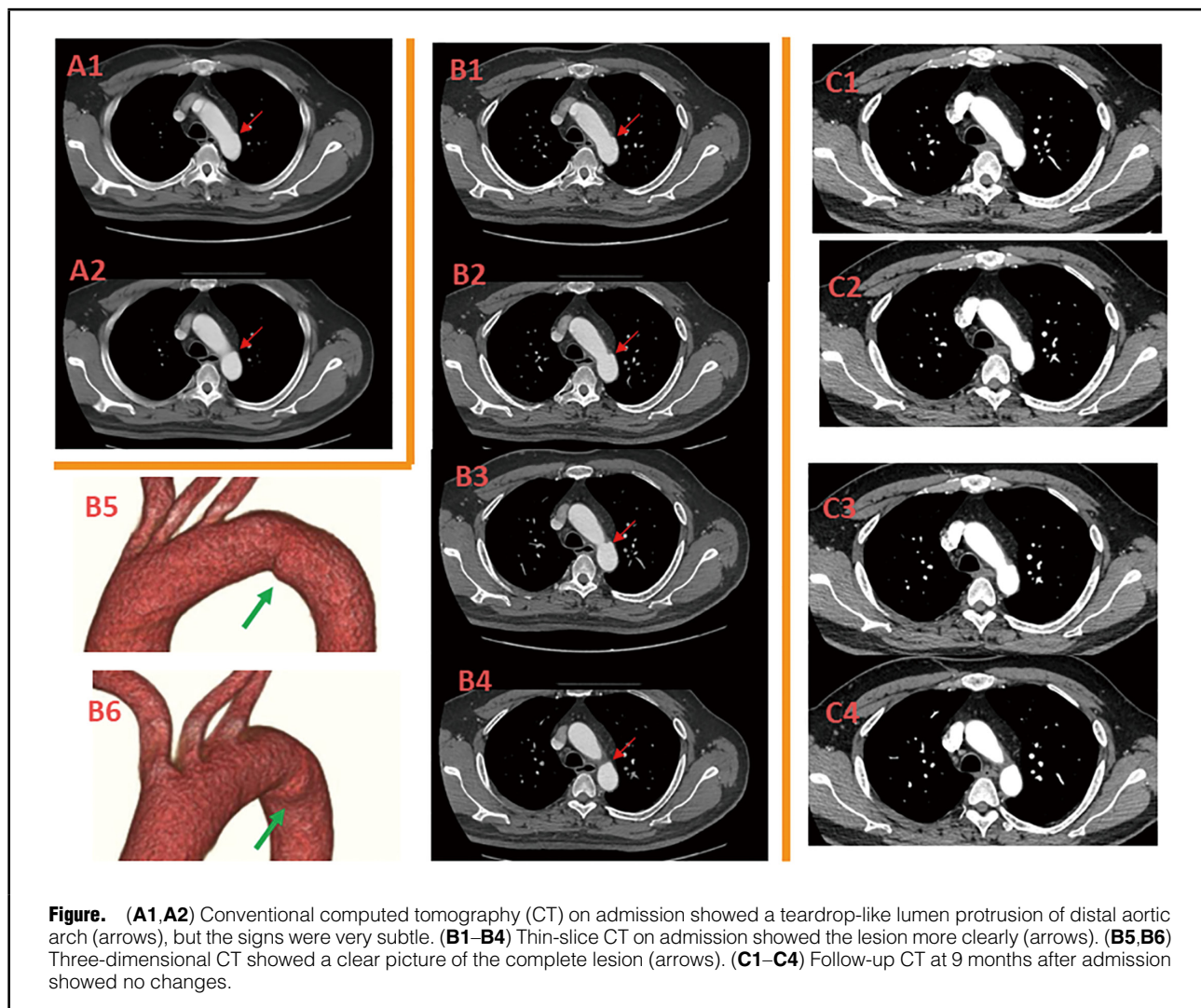


Imaging Study of Acute Limited Intimal Tear

Taiji Okada, MD; Koichi Akutsu, MD, PhD; Hidemasa Saito, MD, PhD;
Jun Nakata, MD; Takeshi Yamamoto, MD, PhD



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Department of Cardiovascular Medicine (T.O., K.A.), Department of Radiology (H.S.), Division of Cardiovascular Intensive Care (J.N., T.Y.), Nippon Medical School, Tokyo, Japan

Mailing address: Koichi Akutsu, MD, PhD, Department of Cardiovascular Medicine, Nippon Medical School, 1-1-5 Sendagi, Bunkyo-ku, Tokyo 113-8603, Japan. email: koichi-a@nms.ac.jp

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A 51-year-old man presented with chest pain. On admission, his blood pressure was 154/102 mmHg, his white blood cell count was 10,100/ μ L, C-reactive protein was 0.24 mg/ μ L, and D-dimer was 0.5 μ g/mL. No lesion was seen on conventional computed tomography (CT) images taken at the time of admission (**Figure A1,A2**). However, the next day, the conventional CT image on admission was reconstructed into a thin-slice enhanced CT (**Figure B1–B4**) and 3-dimensional (3D) CT (**Figure B5,B6**). We discovered a teardrop-like lumen protrusion of the distal part of the aortic arch, which met the previously specified imaging-based criterion of limited intimal tear (LIT).¹ The patient was diagnosed with LIT, but because of an absence of comorbidities, the patient was managed with rest and blood pressure control. There was no recurrence of chest pain, blood pressure was well controlled, inflammatory marker levels did not increase, and a follow-up CT 1 week after admission showed no progression of the lesion. The patient was successfully discharged 11 days after admission.

Follow-up CT 9 months after admission (**Figure C1–C4**) showed no progression.

LIT is categorized as acute aortic syndrome. It occurs due to a defect in the intimal layer of the aorta with no false lumen, resulting in an eccentric bulge of the aortic wall. LIT is very rare,¹ and its subtle signs often go unnoticed on CT images.

If the cause of a patient's chest pain is unknown, clinicians should consider LIT and look for an eccentric bulge of the aortic wall with thin-slice enhanced CT and 3D CT.

Disclosures

None.

Reference

1. Chin AS, Willemink MJ, Kino A, Hinostroza V, Sailer AM, Fischbein MP, et al. Acute limited intimal tears of the thoracic aorta. *J Am Coll Cardiol* 2018; **71**: 2773–2785.