

Calcium Sign

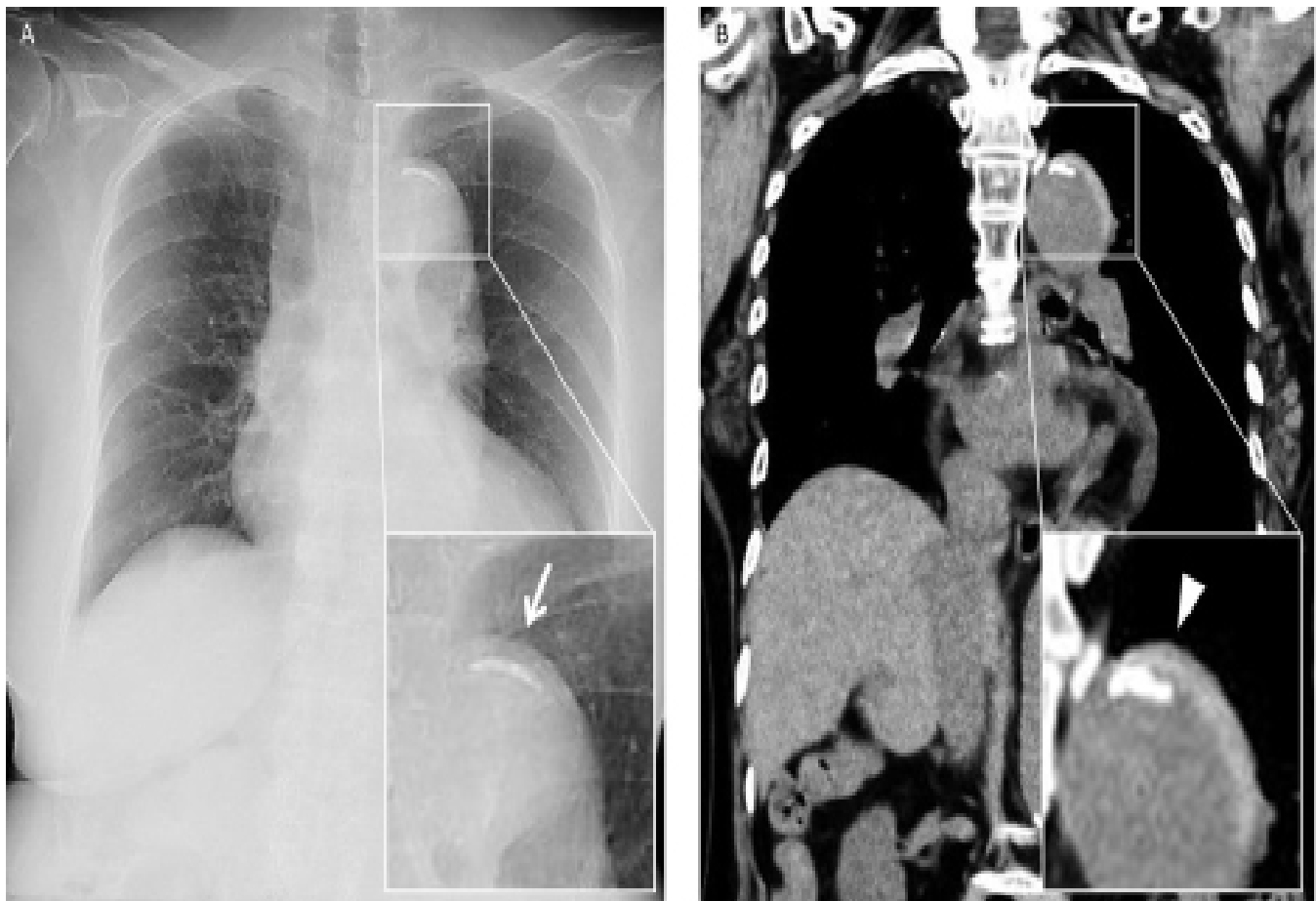
Yuki Taniguchi*; Tatsuya Kawasaki

*Yuki Taniguchi

Department of Cardiology, Matsushita Memorial Hospital, Sotojima 5-55, Moriguchi, Osaka 570-8540, Japan

Phone: +81-66992-1231, Fax: +81-66992-4845; Email: taniguchi.yuki001@jp.panasonic.com

Clinical Images



Description

An 89-year-old woman presented to the emergency room with a three-hour history of chest pain and back pain. The physical examination was unremarkable except for a blood pressure of 175/103 mmHg in the right arm, 156/78 mmHg in the left arm, and a respiratory rate of 24 breaths per minute. An electrocardiogram showed a sinus rhythm without ST-segment changes and echocardiography demonstrated normal chamber size and function. An anteroposterior chest radiograph showed mediastinal widening with calcification of the aortic arch (Panel A); of note, the calcific intima was slightly separated from the outer aortic soft tissue – the calcium sign [1,2] (the inset of Panel A, arrow). A coronal image of chest Computed Tomography (CT) without contrast material showed discrete part with high CT values outside of the aortic calcium (Panel B and the inset, arrowhead). The lesion with high CT values of the aorta, which started from the ostium of the left subclavian artery, extended to the diaphragm. CT of the chest and abdomen obtained after administration of contrast material revealed no intimal tear in the thoracic and abdominal aorta. A diagnosis of Stanford type B acute aortic dissection after early thrombogenic closure was made. The calcium sign can be observed in patients with aortic dissection although the diagnostic value is unsatisfactory (e.g., sensitivity of 6 to 13% [3]). Her clinical course was uncomplicated with conservative treatment and the patient was later transferred to a rehabilitation facility in a stable condition.

References

1. Wittels K. Aortic emergencies. *Emerg Med Clin North Am.* 2011; 29: 789-800.
2. Strayer RJ, Shearer PL, Hermann LK. Screening, evaluation, and early management of acute aortic dissection in the ED. *Curr Cardiol Rev.* 2012; 8: 152-157.
3. Klompas M. Does this patient have an acute thoracic aortic dissection? *JAMA.* 2002; 287: 2262-2272.

Manuscript Information: Received: October 20, 2018; Accepted: March 22, 2019; Published: March 29, 2019

Authors Information: Yuki Taniguchi*; Tatsuya Kawasaki
Department of Cardiology, Matsushita Memorial Hospital, Osaka, Japan.

Citation: Taniguchi Y, Kawasaki T. Calcium Sign. *Open J Clin Med Case Rep.* 2019; 1526.

Copy right statement: Content published in the journal follows Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>). © **Taniguchi Y 2019**

About the Journal: Open Journal of Clinical and Medical Case Reports is an international, open access, peer reviewed Journal focusing exclusively on case reports covering all areas of clinical & medical sciences.

Visit the journal website at www.jclinmedcasereports.com

For reprints and other information, contact info@jclinmedcasereports.com