## [ PICTURES IN CLINICAL MEDICINE ]

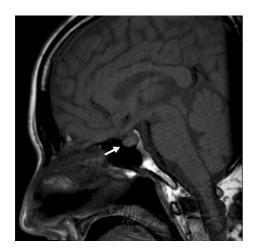
## **Erdheim-Chester Disease**

Shinya Yamamoto<sup>1</sup>, Shimpei Matsumi<sup>1</sup> and Shinichi Teshima<sup>2</sup>

Key words: non-Langerhans histiocytosis, primary medicine

(Intern Med 59: 309-310, 2020)

(DOI: 10.2169/internalmedicine.3324-19)

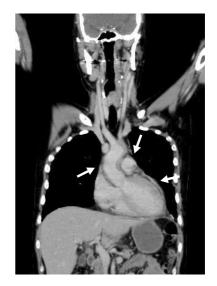


Picture 1.



Picture 3.

A 51-year-old man presented with a 1-month history of fatigue and shortness of breath. His medical history included

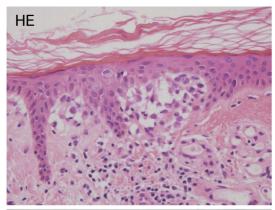


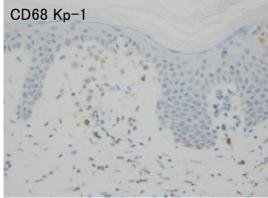
Picture 2.

central diabetes insipidus with lymphocytic hypophysitis (Picture 1) diagnosed eight months earlier. A physical examination and laboratory tests revealed no significant abnormalities. Contrast-enhanced computed tomography revealed pleural thickening, pericardial fibrosis, a circumferential periaortic lesion called "coated aorta" (Picture 2), and rind-like infiltration surrounding the kidneys, also known as "hairy kidney" (Picture 3). Skin and pleural tissue biopsies showed foamy histiocytes with surrounding fibrosis [CD68(+), factor 13a (+), CD1a (-), and S-100 (-); Picture 4]. A diagnosis of Erdheim-Chester disease (ECD), a rare non-Langerhans histiocytosis, was made based on the histopathological findings and clinical and radiologic features. Bone and skin lesions were absent. The BRAF mutation was negative. We did not check for the NRAS mutation. He was treated with interferon-alpha, and his symptoms improved. ECD has multiorgan manifestations, including diabetes insipidus. Radiological imaging findings are unique and useful for the di-

Received: May 18, 2019; Accepted: July 16, 2019; Advance Publication by J-STAGE: September 26, 2019 Correspondence to Dr. Shinya Yamamoto, audrey.hepburn.19611953@gmail.com

<sup>&</sup>lt;sup>1</sup>Department of General Internal Medicine, Shonan Kamakura General Hospital, Japan and <sup>2</sup>Department of Diagnostic Pathology, Shonan Kamakura General Hospital, Japan





Picture 4.

agnosis of ECD (1, 2).

The authors state that they have no Conflict of Interest (COI).

## References

- Diamond EL, Dagna L, Hyman DM, et al. Consensus guidelines for the diagnosis and clinical management of Erdheim-Chester disease. Blood 24: 483-492, 2014.
- **2.** Mamlouk MD, Aboian MS, Glastonbury CM. Case245: Erdheim-Chester disease. Radiology **284**: 910-917, 2017.

The Internal Medicine is an Open Access journal distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (https://creativecommons.org/licenses/by-nc-nd/4.0/).

<sup>© 2020</sup> The Japanese Society of Internal Medicine *Intern Med 59: 309-310, 2020*