

[PICTURES IN CLINICAL MEDICINE]

Adrenal Lymphoma Presenting with the CT Angiogram Sign

Satoshi Murao¹ and Takaaki Kiuchi²

Key words: adrenal lymphoma, CT angiogram sign

(Intern Med 57: 1945-1946, 2018)

(DOI: 10.2169/internalmedicine.0389-17)



Picture 1.



Picture 2.

The patient was a 65-year-old man who presented disturbed consciousness and hyponatremia. After salt (25 g per day) supplementation, his serum sodium level was 125 mEq/L. A laboratory analysis revealed the following

¹Department of Diabetes and Endocrinology, Takamatsu Hospital, Japan and ²Department of Radiology, Takamatsu Hospital, Japan

Received: October 23, 2017; Accepted: November 23, 2017; Advance Publication by J-STAGE: February 28, 2018

Correspondence to Dr. Satoshi Murao, sat.murao@gmail.com

findings: white blood cell count, 7,500/ μ L with 5.2% eosinophils; plasma adrenocorticotropin (ACTH), 395 pg/mL; and serum cortisol, 4.3 μ g/dL. An ACTH stimulation test confirmed adrenocortical insufficiency.

Contrast enhanced computed tomography (CT) revealed bilateral adrenal mass. The renal artery penetrated a left adrenal tumor without encasement (Picture 1, middle). Primary adrenal lymphoma was suspected and diffuse B cell lymphoma was confirmed by biopsy. The patient achieved complete remission after chemotherapy with rituximab (Picture 2).

The CT angiogram sign, vessels penetrating the tumor without encasement, can be observed in tumors such as lymphoma, which grow to surround adjacent vessels and spread without destroying the circumferential structure (1). Although adrenal lymphoma is typically revealed as a low density homogeneous mass with mild enhancement on contrast-enhanced CT (2), recognition of the CT angiogram

sign could be another clue to differentiate adrenal lymphoma from other adrenal tumors.

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

References

1. Vincent JM, Ng YY, Norton AJ, Armstrong P. CT “angiogram sign” in primary pulmonary lymphoma. *J Comput Assist Tomogr* **16**: 829-831, 1992.
2. Taffel M, Haji-Momenian S, Nikolaidis P, Miller FH. Adrenal imaging: a comprehensive review. *Radiol Clin North Am* **50**: 219-243, 2012.

The Internal Medicine is an Open Access article 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/>).