

Clinical Image

Hyaline vascular-type Castleman's disease of the retroperitoneum

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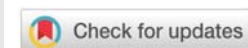
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A 39-year-old man with newly diagnosed and well controlled hypertension was in his usual state of good health. He was diagnosed with a retroperitoneal tumor during a health check-up, which was suspicious of adrenal tumor by abdominal computed tomography. He denied any abdominal fullness, nausea, vomiting, changes in bowel habits, and body weight loss. On admission, his physical exam and laboratory investigations were both normal. Abdominal contrast-enhanced computed tomography showed a heterogeneous-solid, well-encapsulated and hypervascular mass in the retroperitoneal space, measuring 4.6×3.0cm, between the right kidney and the right adrenal gland (Figure 1A). Primary retroperitoneal tumor was considered. Operative resection of the mass was performed and the resected specimen was an irregular mass, measuring 6.5×5.0×2.0cm with the light brown cut surface macroscopically (Figure 1B). Microscopically, the specimen was characterized by hyperplasia of germinal centers, atrophy of lymph follicles, onion-skin appearance of the mantle zone around the germinal centers and lollipop appearance with sclerotic blood vessels radially penetrating atrophic germinal centers (Figure 1C). Furthermore, lymphomas were excluded based on the lesion staining infallibly immunoreactive for CD20, CD3, and CD21 by immunohistochemistry (Figure 1D-F). Final diagnosis was hyaline-vascular type of localized Castleman's Disease on the basis of the above histopathologic examinations. Castleman's disease, related to human herpes virus type 8, is a group of rare and heterogeneous disorders with characteristic lymph node histopathological abnormalities, which often occurs in the mediastinum and extrathoracic involvement [1]. However, retroperitoneal involvement is uncommon. The more common unicentric Castleman's disease

usually has a better prognosis because of the localized solid mass. The presentations of unicentric Castleman's disease, mostly the hyaline-vascular types, usually present as an asymptomatic mass [2]. As described in this case, Castleman's

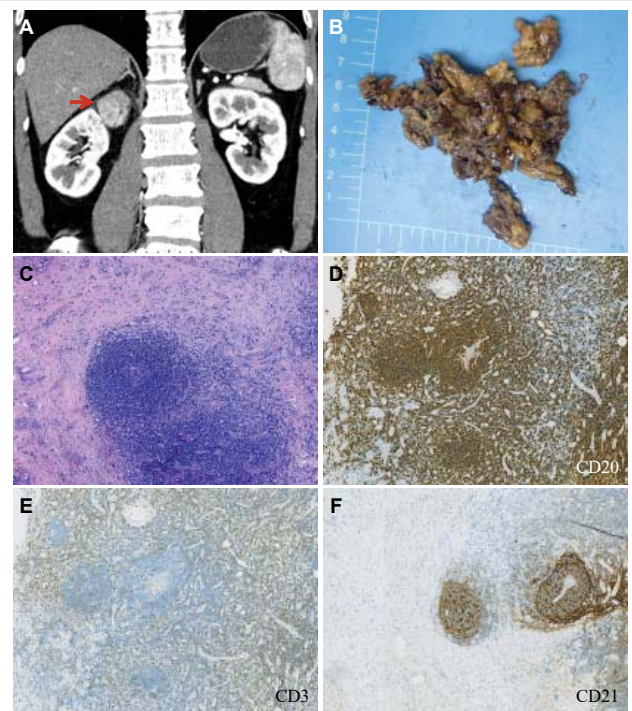


Figure 1: Hyaline Vascular-Type Castleman's Disease of the Retroperitoneum. (A). A heterogeneous-solid mass in the retroperitoneal space defined by computed tomography. (B). Operative resection of the mass. (C). Hematoxylin and eosin staining of the lesion. (D-F). Immunohistochemical analysis positive for CD20, CD3, and CD21 in neoplastic cells.



disease with an asymptomatic and retroperitoneal tumor in young man is rare. Early diagnosis and surgical resection of an unusual retroperitoneal tumor are significantly important to prevent tumor aggravation although Castleman's disease with a localized form is a kind of benign tumor [2,3]. As a diagnostic and curative therapeutic method, complete surgical resection is the preferred therapy for the unicentric form [1,4]. After surgery, no recurrence and episodes were noted for our patient in the next several years.

Acknowledgement

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Ethical statement

The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Written informed consent was obtained from the patient for publication of this "GI Image".

Author's contributions

Collection of data and writing: Wei-Feng Huang.

Pathology analysis and interpretation: Yi Ding.

Final approval of the manuscript: Wei Liu.

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