A Case Report of Giant Retroperitoneal Lymphnode Hyperplasia

Hae Won Park, M.D.

Department of Radiology, Korea General Hospital

Case Report

I have experienced an unusual case of giant lymphnode hyperplasia in a 35 years old male. In 1954 Castleman first described a thymoma-like mass in anterior mediastinum. Many reports of this condition have since appeared in the literature. This idiopathic benign condition with massive enlargement of lymphnodes was described usually intrathoracically. As far as I can ascertain there has been no report of ultrasonographic appearance. This article describes ultrasonographic features and CT findings of a case of Castleman's disease in unusual location, retroperitoneum. This condition is indistinguishable from other space occupying condition such as retroperitoneal leiomyoma and leiomyosarcoma or rhabdomyosarcoma. The purpose of this article is to present the ultrasonographic appearance which should be considered in differential diagnosis.

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at level from L1 to L4. (Fig. 3, Fig. 4) Inferior vena cava was markedly displaced anteriorly. Head and body of the pancreas were also anteriorly displaced. A few small calcifications were noted in the mass. The mass was clearly separated from adjacent structures or organs. The mass showed moderate homogeneous enhancement following injection of contrast medium. Preoperative diagnosis was benign retroperitoneal tumor.

At laparotomy, tumor was identified in retroperitoneum between right kidney and aorta. The mass was well encapsulated and 10 × 6 × 4.5 cm in size. The mass weighed 130 gm. Histological examination confirmed to giant lymphnode hyperplasia, hyaline-vascular type.

Discussion

Since Castleman’s original description, this unusual tumor is still underdiscussion. This condition is a benign, enlarged mass of lymphnodes. Cause of this

Fig. 1. Longitudinal abdominal scan
A large echoluent mass lesion displacing inferior vena cava anteriorly. A few calcifications are noted in the lesion.

Fig. 2. Transverse abdominal scan.
A well defined echoluent mass lesion in retroperitoneum. There shows a calcification in center of the lesion.

Fig. 3. Abdominal CT (Post-contrast).
A large high density mass lesion displacing head and body of pancreas.

Fig. 4. Abdominal CT (Pre-contrast).
A calcification is well demonstrated in the mass.
condition is unknown. There is no sexual predirection. Histologic term is "angiofollicular lymphnode hyperplasia" and various synonyms, such as "giant hemolymphnode", "angiomatous lymphoid hamartoma" and "benign giant lymphoma" have been known. This lesion is asymptomatic and frequently discovered on a routine chest PA as mediastinal or hilar mass. Extrathoracic location has been infrequently described, including neck, pelvis, mesentery, vulva and mouth. Keller and associates distinguished two histologic types, hyaline-vascular and plasma cell type. Pathogenesis is not clear but Abell believed that this disease represents hamartoma of lymphnode with a frequent vascular predominence. Castleman argue the hamartomatous nature of this condition because no evidence of congenital origin.

Asymptomatic type which accounts for 80 to 90% of reported case is hyaline-vascular type. Rare plasma cell type may represent anemia, increased erythrocyte sedimentation rate, hypoalbuminemia, and hyperglobulinemia. Also fever, growth retardation, disturbance of liver function and leukocytosis were reported.

Robert J. Tuttle and associates described angiographic feature of this condition. Markedly enlarged capsular vessels arborizing over the surface of the tumor and irregular vascular lakes were noted. An eventual diffuse blush was identified, indicating a rich capillary network throughout the stroma of the tumor. Eiko Iida and associates described computed tomographic finding of mesenteric Castleman tumor in 1983. They showed homogeneous contrast enhanced soft tissue mass measuring 4 cm in diameter anterior to inferior vena cava. It was plasma cell type. Renal atrophy and parenchymal destruction with renal sinus lipomatosis were noted in that case. Same computed tommographic finding was noted in this case with moderate homogeneous enhancement. But no renal sinus lipomatosis or renal atrophy is seen. Computed tommography should be the procedure of choice in screening patient with suspected primary retroperitoneal tumor. It provide size, extent and composition of the tumor as well as their effect on neighboring structure. But specific histologic diagnosis is very difficult on CT scan. This condition should be differentiated from primary retroperitoneal sarcoma. Retroperitoneal masses are commonly malignant and arise from mesenchymal structure. Malignant retroperitoneal tumor usually leiomyosarcoma, liposarcoma, fibrosarcoma or hemangiopericytoma. These tumors may be uniformly solid, may be echofree or may be heterogeneous. In general, leiomyosarcoma and neurofibrosarcoma are echogenic. A large mass with area of necrosis is strongly suggestive of a sarcoma. These tumors could be differentiated by sonographic study from Castleman's disease which is transonic. Surgery is curative if lesion is removed in its entirely. But the lesion can recur, particularly if excision is incomplete. Large inoperable tumor, especially the plasma cell type, may be benefit from radiotherapy.

Summary

An unusual case of benign lymphnode hyperplasia in retroperitoneum is reported with clinical, ultrasonographic and CT findings. Especially these examination give more information to differential diagnosis of retroperitoneal mass.

REFERENCES


