CASE REPORT

Mesenteric Castleman disease: A Case Report

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Castleman disease is a rare lymphoproliferative disorder of unknown etiology. Benign masses of lymphoid tissue are seen in the mediastinum, lung, neck, axilla, mesentery, pelvis, retroperitoneum, and within the muscle. We report the radiographic features of a mesenteric mass, by which the possibility of Castleman disease should be considered.

Keywords: Castleman disease, Lymphoid tissue, Mesenteric mass

First described in 1954[1], Castleman disease (an idiopathic cause of lymphadenopathy or an angiofollicular lymph node hyperplasia or giant lymph node hyperplasia) is a rare disease. Affected persons most frequently are young adults, characterized by lymphocyte proliferation. Castleman disease is most frequently described in the radiology and pathology literature as lymphadenopathy in the mediastinum, but may be found at other anatomic locations. In this case report, we present the radiographic features of a solitary mesenteric mass by which the diagnosis of Castleman disease should be considered.

CASE REPORT

A 40 years old male patient with no significant past medical history was found, on routine physical examination, to have a non-tender, mobile 5 cm mass in the left hypochondrium. Routine laboratory tests including of WBC, ESR, Hb, platelet were normal.

Initial assessment with ultrasound examination revealed an ovoid 5 × 4 × 3 cm predominantly hypoechoic mass (Fig 1). Computed tomography of the mass demonstrated a well-defined homogeneous soft-tissue mass without calcification (Fig 2). Dense uniform enhancement was found in post-contrast study. Angiography confirmed the presence of a hypervascular mass supplied by jejunal branches of the superior mesenteric artery, and a homogeneous capillary blush was observed without early venous drainage (Fig 3). The feeding arteries did not appear to be encased.

The patient underwent a laparotomy with resection of a well-encapsulated mesenteric mass which was solid, homogeneous and yellow on cut surface. The histo-pathological examination revealed (Fig 4) enlarged lymph node containing...
numerous lymphoid follicles with small, involuted, and partially collagenized germinal centers exhibiting prominent central hyalinized blood vessels surrounded by mantle of small mature lymphocytes. This pattern was consistent with the diagnosis of the hyaline vascular type of Castleman disease.

**DISCUSSION**

Primary neoplasms of the mesentery are very rare. They are usually of mesenchymal origin and include desmoid tumor, lipoma, liposarcoma, and fibrosarcoma. Metastatic tumor and lymphoma are more common [2]. Our patient had no systemic symptoms. The mass was well circumscribed and showed homogeneous enhancement on CT. Castleman disease is a benign condition of unknown etiology characterized by proliferation of mature lymphocytes and/or plasma cells. The condition was first reported by Castleman in 1956 when he described a group of patients with large thymoma-like masses in the anterior mediastinum[3]. Since then similar benign proliferations of lymphoid tissue had been reported in all areas where lymphoid tissue is normally found, but more than 70% of cases involved the mediastinum with less than 10%
being intra-abdominal.[4]. The condition has also been called angiofollicular lymph node hyperplasia[5].

Castleman disease generally affects young adult, often presenting as an incidental finding of a mediastinal mass on plain chest radiograph. Cases of less common form have also been recently described, in which patient develop hepatosplenomegaly and lymphadenopathy with increased susceptibility to infections and malignancies, mimicking features of lymphoma[6].

Castleman disease is a lymphoproliferative disorder of unknown etiology. It can be localized or multicentric. The localized form is considered to be benign, and surgical removal of the mass provide cure. The multicentric form may have an aggressive course. It has two histologic types: hyaline vascular and plasma cell. The hyaline vascular type predominates in thorax and is rare in the mesentery [7]. The enlarge lymph nodes are highly vascular and show marked enhancement on contrast enhanced CT [8]. The mesenteric disease is usually of the plasma cell type, which is associated with systemic symptoms such as hematologic, disorders endocrinopathies or peripheral neuropathies [9].

Our patient was asymptomatic, the disease was localized to the mesentery and was of the hyaline vascular type. Castleman disease should be included in the differential diagnosis of hypervascular, well-demarcated soft-tissue masses localized to the mesentery, other possibilities include lymphoma, metastasis, infection (abscess, tuberculosis), sarcoma, schwannoma, paraganglioma and hemangiopericytoma.

**REFERENCES**

卡斯特雷曼氏症（Castleman disease）－個案報告

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卡斯特雷曼氏症（Castleman disease）是一種罕見的類淋巴組織增生失調現象，其病因不明，特徵為淋巴增生。在中膈腔、肺部、頸部、腋下、腸系膜、骨盆腔、後腹膜腔及肌肉各處，可見其良性的淋巴組織腫塊。我們提出有關單一腸系膜腫塊的放射線圖片報告，此例宜做Castleman氏症之另一變異呈現。

關鍵詞：卡斯特雷曼氏症，淋巴增生，腸系膜腫塊