MESENTERIC CASTLEMAN'S DISEASE ACCIDENTAL DISCOVERY OF A CASE OF MESENTERIC CASTLEMAN'S DISEASE IN THE FORM OF AN ABDOMINAL MASS.

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Abstract

Castelman disease is known as benign angiofollicular node hyperplasia disorder; mostly described in mediastinum. The mesenteric localisation is exceedingly rare, that can be ignored in diagnosis front of an abdominal mass. We report the case of a 42 years old man with an abdominal mass. The diagnosis of gastro-intestinal tumor was the most likely, based on clinical and radiologic data. A surgical resection of the tumor was performed and the post-operative follow up was good. The final histological and immuno-histological diagnosis was a castleman's disease in its localized form. In this paper we report one case of a mesenteric castlemandisease, we also clear up the clinico-pathological and radiological features of this disease by full literature review, so as to progress the clinic support.

Introduction:

First time described by benjamin castleman in 1954, it’s a rare benign disease characterised by lymphocyte proliferation [1,2]. Multiple localizations along the different axes of the lymphatic chain have been described with a mediastinal tropism; abdominal location remains rare, and a few cases are reported [2,3]. Mesenteric castleman disease is very rare easily to be ignored as a diagnosis when an abdominal mass is found. Because of nonspecific symptoms and shared radiologic aspects with other entities by imaging it’s difficult to make difference between mesenteric castleman disease and other tumors such as a GIST, tuberculosis, lymphoma and other hyper vascular lesions.

To our knowledge, only 55 cases of mesenteric disease have been reported [4, 6].

In this paper we report one case of a mesenteric castlemandisease, we also clear up the clinico-pathological and radiological features of this disease by full literature review, so as to progress the clinic support.

Case report:

A 42-year-old male patient with no pathological history, was admitted to our consultation for abdominal pain that had been evolving for 6 months, associated with food-induced vomiting, no transit disturbances, and no digestive bleeding, no weight loss and With apyrexia.
Physical examination revealed an abdominal mass of the left flank, the latter was mobile, sensible easing, the rest of the exam was normal. Abdominal CT showed a paramedian tissue process of the left flank, surrounded by a tributary collateral circulation of the superior mesenteric vein which is dilated, this mass measures were 7 cm - 7.2 cm - 5.5 cm (figure 1).

Surgical treatment was decided in front of the clinical and radiological data in favor of a GIST. surgery consisted of resection of the tumor mass.

Postoperative follow-up was good (figure 3) 
Histological and immunohistological description favored a Castleman's disease.

Figure 1:-

Figure 2:-

Figure 1-2:-CT images of the lesion.
Figure 3: the abdominal mass of the mesenteric.

**Discussion:**
1. Castleman's disease was initially defined by Benjamin Castleman in 1956 [1].
2. It is characterized by a lymphoproliferative abnormality.
3. Histologically, it is classified into 2 types: the most frequent hyaline vascular with a proportion of 80% - 90% and plasma cell 10% - 20% [1].
4. Clinically as radiologically it can be divided into two forms: unicentric and multicentric; the first is localized with an often poor and atypical clinical picture, the second is characterized by a disseminated lymphadenopathy and often associated with multisystem symptomatology.
5. The mesenteric localization of the castleman's disease is rare, after a revision of English literature we could find only 55 cases [1,6,17]. Most of them were diagnosed at the pathological stage because of its rare and atypical character. In our case, a GIST was the main diagnosis and tuberculosis because of the endemic nature of this pathology in Moroccan context.

**Radiological characters:**
Ultrasound presents by a hypo-echogenic mass.
CT: aspect of intra abdominal mass of tissue density well defined with a homogeneous contrast enhancement and hyper vascularisation of the mass [18].

**Differential diagnosis:**
In front of the clinical and radiological non-specific character of the disease: several diagnostics may appear in particular GIST, lymphomas, ganglionic tuberculosis, ectopic Pheochromocytoma[8].

**GISTs** are the most common digestive mesenchymal tumors.

Radiologically it has a rounded appearance with a uniform contrast enhancement especially if they are small (<5cm). Otherwise it has a polylobulated appearance if large (> 5cm) [20].

Most mesenteric Castlemans tumor has a contrast enhancement higher than the GIST [3].

The abdominal location is relatively frequent and represents 5 to 10% of all locations [3].

Lymph node localization in intra-abdominal tuberculosis may also be responsible for the pseudotumoral aspect. It may be a cluster of adenopathies of small size agglomerated satellites of digestive involvement, peri-pancreatic or hepatic pedicles as the case of the patient of our study. This group, however, specific to tuberculosis more often directs, because of the seat of the lesion towards a tumoral pathology [9].
The symptomatology is nonspecific and the palpation of an abdominal mass can wrongly lead to a malignant tumor pathology, especially as the symptomatology evolves in a context of deterioration of the general state. This diagnosis, which is difficult and frequently unrecognized, must be mentioned especially if the epidemiological context is suitable [3], in the presence of concomitant pulmonary involvement, or in the presence of a history of tuberculosis.

Ectopic pheochromocytoma comprises approximately 10-25% of pheochromocytoma, 30% of which could be malignant, and surgical resection is still the most effective treatment [10].

The enhancement mode of ectopic pheochromocytoma may also be similar to those of mesenteric Castleman disease [11].

The clinical and laboratory examination can contribute to the differentiation of these two diseases.

Most patients with functional ectopic pheochromocytoma show paroxymal hypertension clinically and in laboratory examination show elevation of catecholamine and its metabolic products [1].

Microscopically, mesenteric castleman’s disease must be differentiated from other benign and malignant lesions [1].

**Treatment decision:**
In front of an abdominal mass whose clinical and radiological character is not specific, the ideal is to make an echo-guided biopsy especially if the diagnosis of a castleman’s disease is suspected. Surgical treatment is often advocated especially that the diagnosis of GIST is suspected. the search for another location (axillary and cervical ADP, thoracic CT) is imperative to eliminate the multicentric form requiring complementary chemotherapy and postoperative corticotherapy [12-13].

**Conclusion:**
Castleman disease in its localized form should not be forgotten in front of abdominal mass or a locally advanced nodes discovered during preoperative investigation or intraoperative exploration.

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