Abdominal mass as the first sign of follicular lymphoma B of mesentery: Case report

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KEYWORDS

Lymphoma;
Follicular lymphoma B;
Ultrasound
examination.

Abstract Primary mesenteric lymphoma is a disease of the mesenteric lymph nodes that may represent a localized process or a component of a more disseminated pattern of disease.

The case refers to a woman of 78 years, that was studied by ultrasound examination after accidental finding of abdominal mass. The examination confirmed the presence of the lesion; it defined the place (peritoneum) and the features (neoplastic lesion). Computer tomography (CT) confirmed the ultrasound diagnosis and showed an additional smaller lesion. The cytology exam from the CT biopsy showed to be a follicular lymphoma B. This case confirms the ultrasound examination role in the study of peritoneal lesions and underlines how a proper diagnostic process is essential for therapy.

Sommario Il linfoma primitivo del mesentere è una malattia a partenza dai linfonodi mesenterici; può presentarsi come un processo localizzato o disseminato. Il caso in esame si riferisce ad una donna di 78 anni che, in seguito ad un riscontro occasionale di una massa addominale, veniva sottoposta ad ecografia. L'esame confermava la presenza della lesione, ne definiva la sede (peritoneo) e le caratteristiche (neoplasia). La tomografia computerizzata (TC) confermava la diagnosi ecografica ed evidenziava una seconda lesione di minori dimensioni. L'esame citologico della biopsia TC guidata dimostrava trattarsi di linfoma B follicolare. Il caso in esame conferma il ruolo dell'ecografia nello studio delle lesioni del peritoneo e dei mesi e sottolinea come un iter diagnostico corretto sia essenziale per la terapia.

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Introduction

Solid primary tumors of the mesentery are rare; Reasonable estimates of incidence range from 1 case per 200,000–350,000 population. The histological type of follicular lymphoma is more frequently found in the mesentery.

Among the various histological types of mesenteric tumors, mesenteric lymphoma is frequently associated with abdominal pain and abdominal mass. A few cases of mesenteric lymphomas observed in association with immune thrombocytopenia and dermatitis herpetiformis have been reported.

Mesenteric lymphoma is treated by cytotoxic chemotherapy. Although some cases are diagnosed following resection of an uncharacterized mesenteric mass, surgical treatment is best used as a diagnostic tool when the diagnosis is probable but uncertain [1].

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Fig. 1 Ultrasound: solid mass with irregular margins and inhomogeneous eco-structure (A), vascularized (B).

Case report

The patient, female of 78 years old, with a pathological anamnesis insignificant, came to our observation for an abdominal ultrasound examination because the presence of a hypogastric tumefaction, not painful, but hard.

The ultrasound put highlighted, in the right region around the navel, a solid form with irregular margins, inhomogeneous eco-structure and maximum diameters of 5×4 cm (Fig. 1A), vascularized (Fig. 1B), then with the characteristics of a neoplastic lesion peritoneal.

CT confirmed the presence of the solid mass in the hypogastric region, with ante-posterior diameter of about 5 cm and transverse of 4 cm, with irregular margins (Fig. 2A), with baseline density of about 55 UH, with contrast enhancement (reaching a density of about 110 UH), central areas of necrosis, without calcifications, by neoplastic nature.

CT further highlighted a second lesion approximately 2×2.5 cm, adjacent to the previous, similar nature, associated to diffuse infiltration of the fat with mesenteric panniculitis, confirming a greater sensitivity compared with the ultrasound examination.

There are also observed two additional lesions of similar meaning, located respectively one in a place peritoneal left lateral line, about 16 mm, and the other in the mesentery, on the left too, about 1.7×1.8 cm, and some lymph nodes enlarged, maximum size of about 1.6 cm in the hepatic hilum and around the aorta bilaterally.

The main mass is well dissociated from the intestine, and does not involve vascular structures. We are running biopsies CT guided in the central and the peripheral fields of mass, with the FNAB 24 G and 20 G technique (Fig. 2B), and it is obtained an abundant material, that will be in part crawled on slide, and partly buried in formalin.

The cyto-histological and immunohistochemical examination establish the diagnosis of follicular lymphoma B.

Discussion

Mesenteric tumors are uncommon lesions that are generally considered inclusive of similar lesions of the omentum; may arise from any of the elements of mesenchymal tissue [2–5]. They present themselves as masses with different aspects eco-structured or as localized tumors of peritoneum [6]; ascite is frequently associated to malignant form the differential diagnosis is established with inflammatory process and metastases.

The ultrasound confirmed the clinical suspicion, allowed lesion's localization and is the best examination to make biopsy [7,8]. CT has a greater sensitivity, a spatial resolution and the possibility of characterization [9], and therefore it should follow after the ultrasound. The Color Doppler does not increase the sensitivity of it but it is a help in the differential diagnosis between benign and malignant lesions, because the malignant forms may submit an anarchist vascular intra-lesion. The appearance of peritoneal

Fig. 2 TC: solid mass in the hypogastric region with irregular margins, well dissociated from the intestinal loops that not involves vascular structures (A). Control of the position of the needle biopsy guided TC (B). (Courtesy of Dr. R. Dore).

lymphoma, in ultrasound and in CT, is indistinguishable from that of peritoneal carcinomatosis, of mesothelioma, leiomyosarcoma and often also that of benign processes such as tubercular peritonitis [10–12] and then requires the execution of biopsy for the characterization of nearly all masses peritoneal [13].

In this case the biopsy TC was preferred for several reasons: the fact that the biopsy was done immediately after CT examination with no request to the patient to dress himself; the lesion was palpable, so it wasn't needed ultrasound to guidance the biopsy; it was just necessary the needle position control in the context of the lesion, a good experience of CT biopsy of the radiologist. In other conditions, we would certainly prefer the ultrasound examination.

This case confirms the role of the study of peritoneal lesions and underlines how a proper correct diagnostic is essential to proper treatment and to avoid unnecessary surgery.

Informed consent was obtained from the patient for publication of this case report.

Conflict of interest statement

The authors have no conflict of interest.

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