Primary tumours of the lesser omentum are rare, and this rarity may account for the paucity of information in basic texts and in literature (1-5). To our knowledge fibroma of the lesser omentum has been described in only one case (6).

We present a case of lesser omentum giant fibroma and discuss the different diagnostic possibilities that should be taken in consideration when facing a mass of the lesser omentum.

Case Report

B.R. 43 years-old male was admitted in our emergency room service for epigastric and mesogastric abdominal pain and fever. The remote pathological anamnesis showed aortic bicuspidism for which the patient was under strict cardioligic control. At physical examination the patient presented tenderness of the abdomen with a palpable 9 x 18 cm periombelical mass that reached the hepigastric region. Serological exam showed leucocytosis 17 x 10^3/μL. US examination showed a solid abdominal mass 20 x 16 x 10 cm of diameter with disomogenic hyperechogenicity. Contrast enanched CT showed a 20 x 16 x 10 cm mass with disomogenic structure with peripheral contrast enanchement more expressed in the left portion of the mass, apparently intraperitoneal in contact with the stomach and the first portion of the duodenum (Figure 1). In the most cranial portion of the mass it was possible to notice serpiginous stripes with perileional adipose tissue suspect for infiltration.

EGDS performed for suspected primitive tumour of the stomach was negative for gastric and duodenal lesions.

The patient underwent explorative laparotomy that showed a well capsulated tumour of the lesser omentum, slightly adherent to the stomach. The mass was removed without difficulty. Macroscopically this mass was covered with a thin layer of adipose tissue, it showed a white cut surface with some black spots and the consistence of wood (Figure 2). Histologically, the
Glant fibroma of the lesser omentum: report of a rare case

The tumour was composed of a thick fibrous capsula, a fascicular structure with areas of moderate cellularity alternated to areas of sclerosis, with spots of hemorrhages and infartual necrosis. The tumoral cells were spindle-shaped cells within collagen bundles, and did not present mitotic activity or atipies and showed a low proliferation index with Ki 67 (18,3%). They showed histochemical positivity for CD 34 and negativity for C-Kit, anti-smooth cell and S100 antigen. Final diagnosis: solitary fibroma of the lesser omentum.

The patient had an uneventful post-operative course and was free of recurrence at 1 year follow-up.

Discussion

Fibromas are well-circumscribed tumors consisting of dense collagen bundles and variable number of mature fibroblast. They are usually small tumours that are firm, encapsulated and pearly gray on cross section (7).

Despite the widespread distribution of connective tissue throughout the body fibromas are surprisingly limited in their origin. Infact while fibroma of tendon sheath, for example, is a comparatively common tumour, the incidence of omental fibroma is not known (8). This is surely due to its rarity, and despite the frequent use of non invasive imaging, the number of incidental findings of these tumors remains low (9). In english litterature only one case of lesser omentum fibroma has been reported before our observation (6).

Symptoms in both cases were epigastric fullness, tenderness, pain and episode of vomiting. US and CT scan resulted in both cases fondamental to study the lesions. Even if some radiological characteristic may be peculiar, for example multiple cystic areas and enhancement of solid areas in leiomyosarcomas on CT, it is usually very difficult to make a pre-operative diagnosis only with radiological examination.

At present, there are no objective data in the literature to support or to deny the performance of fine-
needle biopsy of an omental tumour before omentectomy (9).

Surgical resection is the only method of management not only for histologic diagnosis, but also for curative treatment since fibroma rarely recurs and never develop metastasis (8).

References