

Fever and abdominal tumoral masses

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Abstract: 49 year-old man presented to our clinic for pain in the right hypochondrium, diarrhea, and fever. The clinical examination highlights a tumoral formation in the right side of the abdomen, with firm consistency, poorly defined margins, and present mobility in the deep structures. On biological exams, leukocytosis with neutrophilia, inflammatory syndrome, and hypoalbuminaemia were identified. The first computed tomography exam described parietal thickening of the ascending colon, with infiltrative aspect, and multiple local adenopathies, lomboartoc and interaortocave. Moreover, four nodular liver tumors, with hypodense image in native examination, were identified. The lab tests for infectious diseases were all inconclusives: three hemocultures, three stool samples, and three coproparasitological exams were all negatives. Interdisciplinary examinations, internal medicine and infectious diseases, sustained the diagnosis of colonic neoplasm with peritumoral abscess and liver pseudo-tumoral masses. The colonoscopy did not revealed any bowel lesions relevant for neoplasia. This result as well as the bio-clinical context imposed abstention from surgical intervention.

Wide spectrum antibiotics and symptomatic treatment were initiated. But, ten days after hospitalization, the second computed tomography exam showed reduction of the ascending colon wall thickness associated with significant increases of the liver tumors is so revealed. The investigations for other possible etiologies were so continued.

Keywords: colon tumor, intestinal amoebiasis, liver abscesses.

INTRODUCTION

In current clinical approach of abdominal pathology one must not forgot the rare disorders whose clinical picture and imaging could mime neoplasia, pathology so frequent today.

The current diagnosis of colon tumors is made especially using imaging diagnostic methods, whose accuracy is high, facilitating anaccurate stage diagnosis, very important in determining therapeutic tactics. But it must not be forgotten also the importance of classical clinical features that could bring essential elements for the certainty diagnosis.

CASE REPORT

We present the case of a 50-years old patient, smoker, diabetic, hypertensive, who presented for right upper hypochondrium pain, diarrhea, nausea, febrile syndrome, with the onset of symptoms about 48 hours prior to presentation.

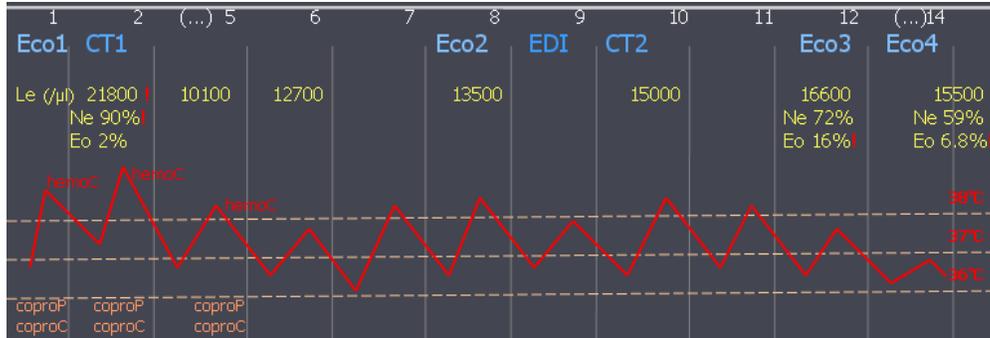
Clinical examination revealed hypochondrium and right flank sensitive abdomen, tumor mass in the right flank, with firm consistency, imprecisely defined, relatively mobile on the deep plans, without signs of peritoneal irritation, fever (38.7°C), shivering.

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Biologically, neutrophilic leukocytosis, inflammatory syndrome, and hypoalbuminemia were noted. Plain chest and abdominal radiography were without

pathological changes (Figure 1). Abdominal ultrasound identified hypoechogenic liver formations.

Figure 1: Biological evolution during diagnostic and after specific treatment



CT exam identifies hepatomegaly and four nodular liver formations: hypodense on native examination, irregularly shaped, with uneven structure, apparently separated from their dense walls (Figures2a, 3a, 4a). In addition, a parietal tumoral formation belonging to ascending colon, located toward liver angle, showing asymmetrical narrowing partially iodophile (with a

maximum thickness of 2.1cm), infiltrating the cecum – ascendant digestive wall and the adjacent fatty abdominal tissue that adheres to the liver capsule. Perilesional, lumbar aortic and interaortocaval adenopathies, (with maximum dimensions of 1.3cm) (Figures5a, 6a, 7a) were also described.

Figure 2(a, b): Computer tomography exam: first two liver masses evolution under treatment

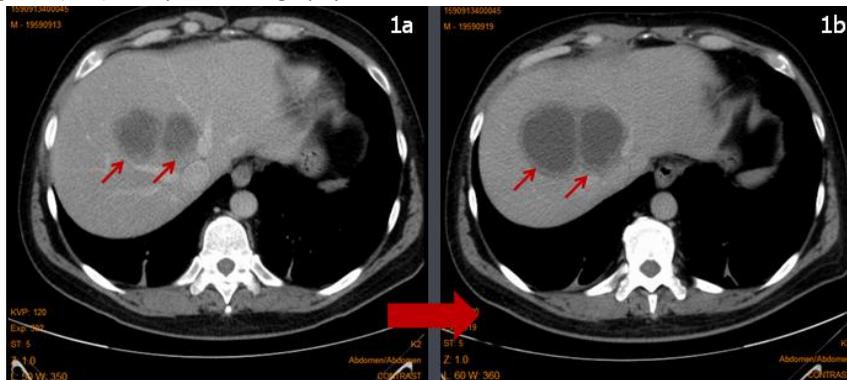


Figure 3(a, b): Computer tomography exam: liver masses evolution under treatment

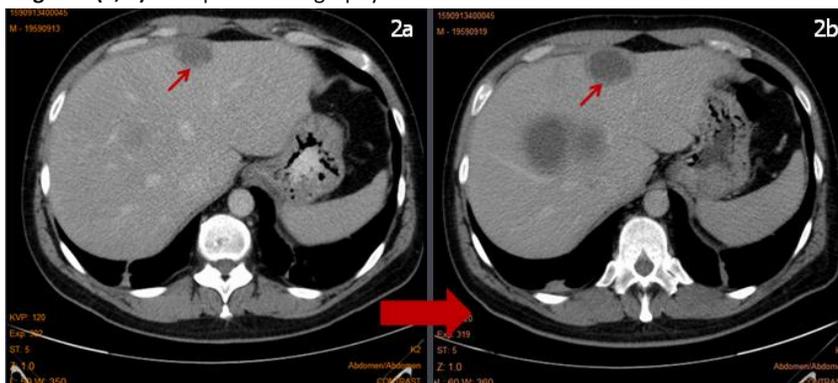


Figure 4(a, b): Computer tomography exam: liver masses evolution under treatment of the third tumoral mass

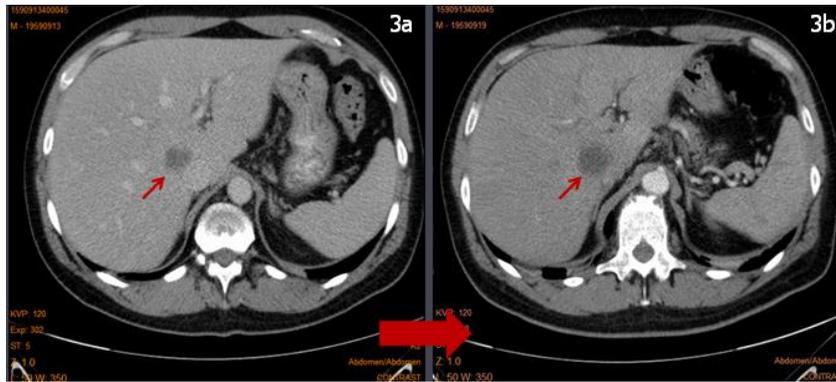


Figure 5(a, b): Computer tomography exam: colon tumor evolution under treatment

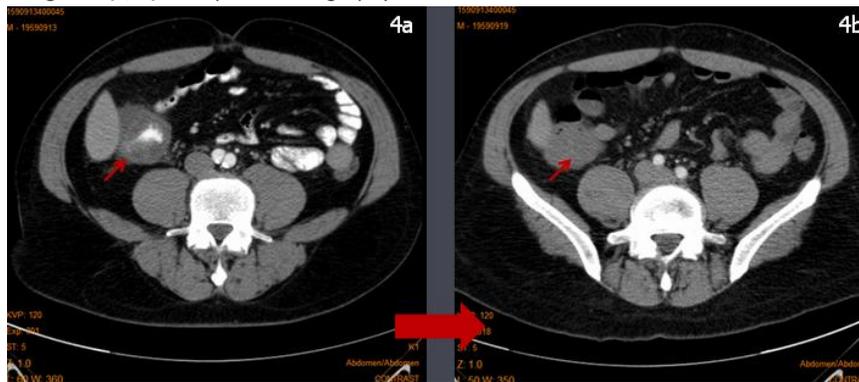


Figure 6(a, b): Computer tomography exam: colon tumor and local adenopathies evolution under treatment

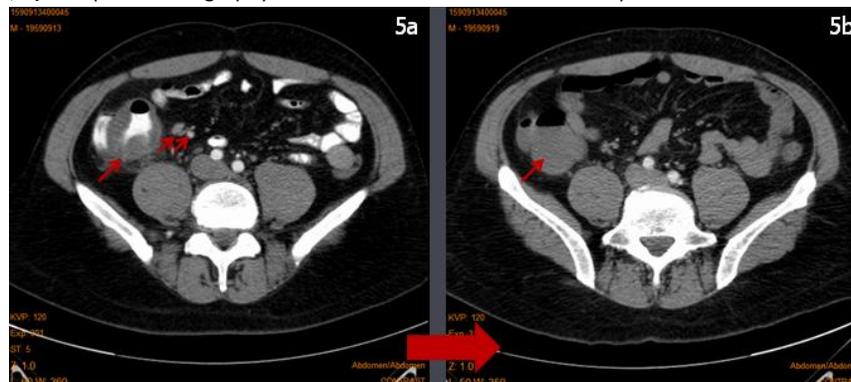
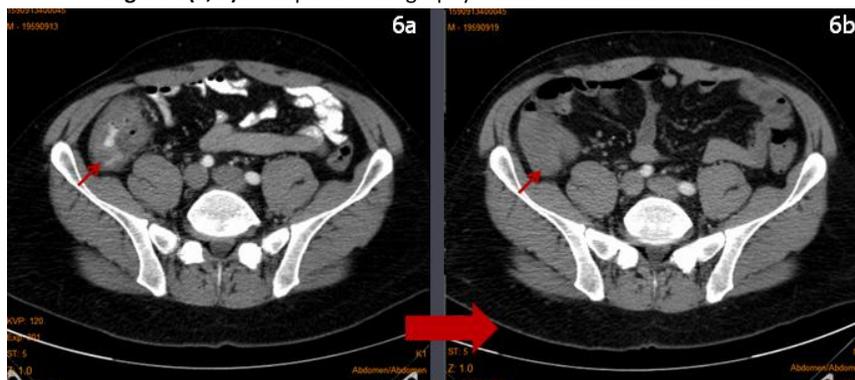


Figure 7(a, b): Computer tomography exam: colon tumor evolution



The paraclinical picture was completed with three negative blood cultures, three negative copro-parasitological exams, three negative coprocultures and tumor markers (carcinoembryonic antigen, CA 19-9, alpha-fetal protein) negative (Figure 1).

Internal medicine and infectious diseases examinations declines the eventuality of infectious or parasitic primary etiology of colony formation and supports the diagnosis of colon cancer with peritumoral abscess and septic liver determinations.

At this point, the imaging seems to support the diagnosis of ascending colon tumoral mass associated with secondary liver metastases or with local associated infection and liver abscesses.

Clinical arguments, however, given the relatively sudden symptoms onset, are pleading for diverticulitis or segmental colitis of the ascending colon with septic determinations in liver. Therefore, we consider it appropriate to postpone surgery and to make further investigations.

It was initiated treatment with broad antibiotic spectrum (imipenem – cilastatin 500 mg/ 500 mg, 4 times daily, linezolid 600 mg 2 times daily, both for 10 days and Moxifloxacin 400 mg daily for 5 days) associated with symptomatic treatment.

Lower digestive endoscopy describes in the rectum, at 4-5 cm from the anus, a 1 mm polyp covered by normal mucosa, at 10 cm from the anus a 2 mm sessile polyp, covered with congestive mucosal, biopsy was performed. In the sigmoid colon, to about 25 cm, a 10 mm semi pedunculated polyp, cylindrical, covered by the congestive mucosa, sample for biopsy. At the descending colon polyp plan, ovoid of 7-8 mm, covered with inflamed mucosa, sample for biopsy. Transverse and ascending colon without changes.

Caecum, opening of appendix and the ileocecal valve without modifications.

The morphopathologic diagnosis of colon polyps was of tubular adenoma. So, the endoscopic examination does not argue for tumor etiology.

The evolution under treatment was favorable: reducing the number of daily diarrheal stool (from 10 to 12 per day to 2-3 per day) and also fever – under

vesperal fever and the overall condition has improved. Biologically, continuing with leukocytosis with neutrophilic, but at lower values and the increasing of cholestasis defining liver enzymes (Figure 1).

We repeat, on day 10 – from the admission – the CT examination and we see a significant increase in volume of liver formations, the largest with a diameter of about 7cm, with better separation than previously, clear evidence of the relatively thick walls and of clear fluid content (Figures 2b, 3b, 4b). Also, the marked reduction in the ascending colon thickness and reduction in the size of abdominal adenopathy (Figures 5b, 6b, 7b) were noted.

Diagnosis of infectious disease is gaining before a possible neoplastic etiology, so we ask for parasitology and infectious diseases check-up and serological determinations.

Positive diagnosis is supported by the presence of Ig G type anti-*Entamoeba histolytica* antibody (negative *Entamoeba histolytica* antigen, negative *Echinococcus* antibodies, negative *Giardia duodenalis* CoproAg and *Cryptosporidium* CoproAg) for which specific treatment is initiated.

Thus, the positive diagnosis was: liver amoeba disseminated abscesses in both lobes, in remission and intestinal amoebiasis affecting the ascending colon, submitted.

The patient's evolution after the initiation of the etiological treatment was favorable with improvement of the general condition, normalization of blood counts at two weeks of antiparasitic ambulatory treatment and marked reduction of liver abscesses dimension with their disappearance in a year.

DISCUSSIONS

Entamoeba histolytica is a protozoan that is an important health problem in tropical and subtropical countries [1]. Infection is fecal-oral, 90% of those affected remain asymptomatic, being determined by ingestion of food contaminated with parasite cysts [2]. It affects particularly the gastrointestinal tract

(more frequently the cecum and ascending colon) and liver [3].

The difficulty of diagnosis in this case was given by the initial CT imaging appearance of ascending colon tumor, accompanied by the negative coprocultures and coproparasitological exams.

Imaging appearance of colonic amoebiasis mimicking neoplastic pathology has been described in the literature, but this presentation as a colon tumor formation remains a rare occurrence [4][5]. Most frequently, the colonic amoebiasis diagnosis is done by highlighting the parasite in the stool, the examination of three successive stools leading to a positive diagnosis in 70% of patients [6].

The correct diagnosis in the presented case was obtained only after achieving immunological determinations, serology for *Entamoeba histolytica* is positive in up to 90% of patients with amoebic colitis [7].

Also, another feature that hindered the diagnosis was the initial presence of neutrophilic leukocytosis, with no eosinophilia (Figure 1), which could be explained by possible plurimicrobial superinfection of the parasite gateway from ascending colon.

After starting antiparasitic treatment an increase in eosinophils in serum is observed, most likely

secondary to parasitic destruction and thus the emergence of new antigenic elements.

Important in the proper management of this patient was refraining from any surgery and introduction of specific therapy (Metronidazol) despite the pressure brought by imaging and biological data. Surgery in *Entamoeba histolytica* infection is a must in cases of acute colitis with necrosis and perforation when it may be necessary even total colectomy [8][9] and could also be followed by many complications.

Another problem of therapeutic tactic was the discussion on the need for drainage of liver abscesses, their sizes being significant. The ultrasound tracking has shown that the effective antiparasitic treatment was enough, observing the gradual decrease of their sizes, with their disappearance one year after the initiation of antiparasitic treatment.

In general, the literature does not support the need of drainage for uncomplicated liver amoebian abscesses [10]. Could be drained big liver abscesses (>300 cm³) or when there are questions about the etiology of liver abscess, like in the case of pyogenic liver abscess [11][12] when cultures from drainage samples could be informative on the etiology and further treatment.

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