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Case report

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Peliosis hepatis misdiagnosed as colorectal liver metastases: a challenging entity

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Abstract

Peliosis hepatis constitutes a rare hepatic benign lesion. Its diagnosis may be challenging especially with carcinomatous lesions. Herein, we reported a case of peliosis hepatis misdiagnosed as colorectal metastases.

Introduction

Peliosis hepatis constitutes a rare hepatic benign lesion [1]. Its diagnosis may be challenging especially with carcinomatous lesions [2,3]. Herein, we reported a case of peliosis hepatis misdiagnosed as colorectal metastases.

Patient and observation

A 39-years old man presented with constipation. He was operated in 2014 for stabbing abdominal wound. Colonoscopy demonstrated a stenotic tumor located at 17 cm from the anal margin without possibility of upstream exploration of the colon. Histopathological exams concluded to a moderately differentiated adenocarcinoma. The computed thoraco-abdominal tomography revealed a single hepatic mass in segment 2 corresponding to liver metastasis. The patient was operated on by laparotomy. The peroperative exploration revealed the existence of three hepatic nodules: the mass in segment 2 plus two other nodules of 1 cm in diameter each in segments 5 and 8. These nodules were diagnosed via per operative hepatic ultra sound. A wedge resection was performed with 5 mm margins associated to anterior resection and immediate colorectal anastomose. The postoperative course was uneventful. The histopathological exam of specimens concluded to an adenocarcinoma classified pT3N1bM1 with two nodules of peliosis hepatis after immunohistochemistry. No relapse of his tumor was diagnosed after a follow up of 6 months.

Discussion

Our case illustrated in one hand diagnosis difficulties encountered for peliosis hepatis misdiagnosed as liver metastases and in the other hand colorectal cancer as probable etiology for this pathology. The pathogenesis of peliosis hepatis is still controversial. It can be induced by hepatocellular necrosis destroying the reticulum framework of the sinusoidal endothelium hence leading to hemorrhage and cyst formation [4]. Acquired immunodeficiency syndrome infection, syphilis, tuberculosis, and Bartonella infection were reported as infectious-causative conditions [4-9]. Peliosis hepatis can also be the effect of drugs like androgenic-anabolic steroids, oral contraceptives, danazol, glucocorticoids, tamoxifen, and mercaptopurine [4,10-12]. Immune deficiency after liver transplantation was also reported as a cause of peliosis hepatis [5]. None of these causes was found in our patient leading us to consider that his rectosigmoidal solid tumor was the cause as described for other cases in association with colon cancer [13], prostate cancer [4] or endometrial adenocarcinoma treated with a progesterone analogues [14]. The peliosis hepatis´s natural history is not fully understood yet with nonspecific clinical presentation and laboratory data as in our case [4]. It is either asymptomatic or slowly progressive in some cases. In other cases, it can be revealed by portal hypertension and spontaneous bleeding [4].

Radiological features of peliosis hepatis may induce errors and render it difficult to make the difference between this condition and other differential diagnosis as for our case: liver metastases, adenoma, focal nodular hyperplasia, hemangiomatosis, liver abscesses, and cystic echinococcosis [13-15]. Computed tomography can demonstrate a marked enhancement if the blood filling peliotic cavities is fresh while a small enhancement or even a nonenhancement is encountered in case of old blood in the peliotic cavities [16]. For magnetic resonance imaging, peliosis hepatis lesions appear as T1 hypointense, T2 hyperintense lesions with early peripheral and late diffuse contrast enhancement on dynamics imaging [17]. Even though percutaneous needle biopsy with histopathology exam allows the diagnosis, a high risk of life-threatening hemorrhage may lead to avoiding this procedure [16]. Microscopic examination demonstrates randomly distributed rounded oval intralobular cavities among normal hepatic parenchyma areas. These cavities communicate with dilated or not dilated sinusoids [4] containing

red blood cells. No specific treatment exists for peliosis hepatis. Treating the causative condition may allow regression of liver lesions such as antibiotics for infectious diseases, avoiding etiological drugs [4]. Liver transplantation is indicated for liver failure [4]. In our case, the suggested etiology is colorectal adenocarcinoma. No guidelines for monitoring patients with peliosis hepatis are proposed yet [14].

Conclusion

Diagnosis of peliosis hepatis may be challenging leading to misdiagnosis thus inappropriate treatment. Careful attention must be taken in order to consider peliosis hepatis as a differential diagnosis for colorectal hepatic metastases.

Competing interests

The authors declare no competing interests.

Authors' contributions

Sana Landolsi: primary author. Mohamed Raouf Ben Othmen: collected the clinical data. Saber Mannai: writer and editor. Imen Ridene: analyzed radiological features. Faouzi Chebbi: reviewed the manuscript. Hichem Houissa: reviewed and approved the manuscript.

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