



Hematoma under the liver Capsule (HSCF) Idiopathic Spontaneous: about a Case

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Abstract The subcapsular hematoma of the liver (HSCF) idiopathic spontaneous is a very rare disease, which most often occurs during pregnancy as part of HELLP syndrome. The idiopathic remains exceptional. We report the case of an 80 years hypertensive woman, admitted to the emergency pain of sudden onset of right upper quadrant; the diagnosis was established HSCF through ultrasound, abdominal CT scan and MRI, no etiology could be found.

Keywords liver; nodular hyperplasia focal; HELLP syndrome; Subcapsular hematoma; Spontaneous

Introduction

A patient of 80 years, Mrs. B.F known hypertensive admitted to emergency for pain of sudden onset of right upper quadrant, lasting for a few hours without notion of trauma or taking anticoagulants. The clinical examination revealed a conscious patient, with conjunctive slightly discolored, afebrile, pulse at 80 beats / min, blood pressure 100 mmHg of systolic and 60 mmHg of diastolic, and oxygen saturation at 98%. Abdominal examination revealed a defense of the right upper quadrant; the rest of the physical examination was unremarkable. Laboratory tests showed a normochromic normocytic anemia 10.6 g / dl of hemoglobin, a blood platelet count 229,000 / microl. The crase balance showed a TP 95% TCA and 21, 8/25 (+/-) 5. Abdominal ultrasound found a heterogeneous collection subcapsular hepatic parenchyma right measuring 15x7 cm. Vesicle acalculous thin wall and a bile duct were also fine. Abdominal CT scan (Fig. 1a, 1b) showed a hypodense fluid collection subcapsular, extent of liver parenchyma right, the sharp limits and without contrast enhancement.



Figure 1a: abdominal scan, axial section, without injection of contrast medium





Figure 1b: abdominal scan, axial section, without injection of contrast medium

Figure 1: Scanner abdominal en coupes axiales sans injection du produit de contraste.

A MRI collection subcapsular liver appears hypointense T1 (Fig 2a) and T2 (Fig 3a) not enhanced by gadolinium, seat of a beach hyperintense T1 (Figure 2b) and T2 (Fig 3b, 3c) in connection with a recent bleeding, no signs for a secondary pathology such as FNH, adenoma or HCC. The patient was hospitalized in intensive care with regular monitoring of its hemodynamic status and state of consciousness, with steady chirurgical. Remained stable hemodynamically, the subsequent evolution was marked by pain regression.

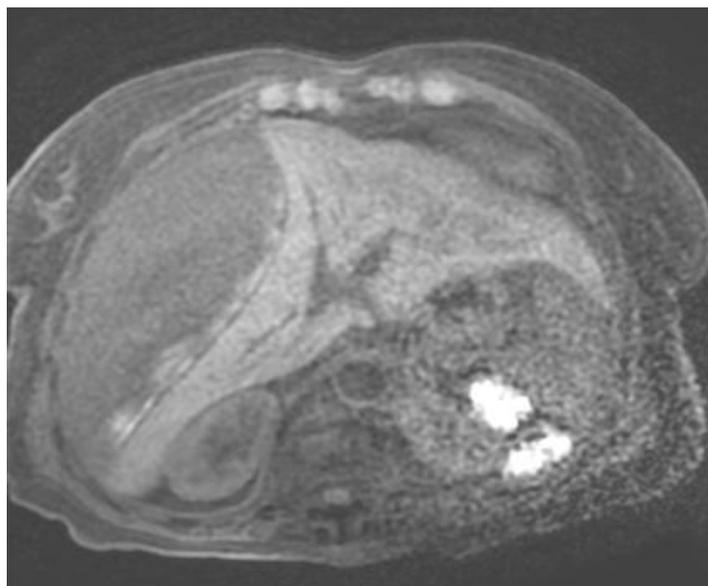


Figure 2a: Abdominal MRI, axial T1 sequence without gadolinium

Analysis of Imagery

Abdominal CT scan (fig.1a , 1b) shows a hypodense subcapsular collection of fluid density, extent of the right hepatic parenchyma , the sharp limits and without contrast enhancement. An MRI collection subcapsular liver appears hypointense T1 (Fig 2a) and T2 (Fig 3a) not enhanced by gadolinium, seat of a beach hyperintense T1 (Figure 2b) and T2 (Fig 3b, 3c) in connection with a recent bleeding, no signs for a secondary pathology such FNH, adenoma or HCC.





Figure 2b: Abdominal MRI, axial T1 sequence without gadolinium
Figure 2: IRM abdominale en séquence axiale T1 sans injection de gadolinium

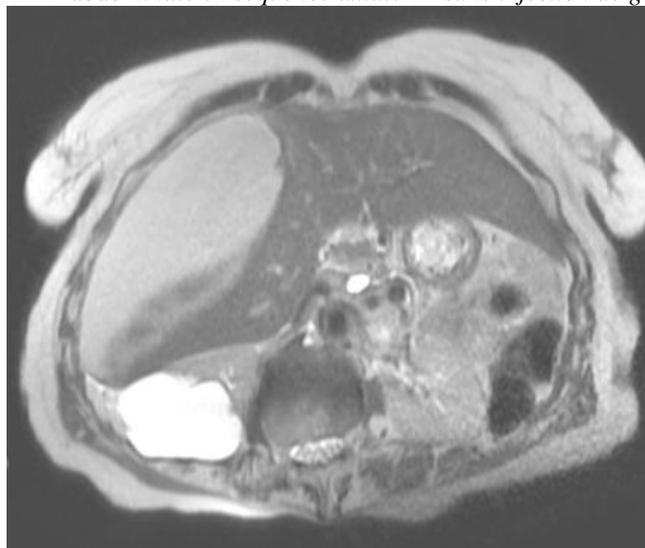


Figure 3a: Abdominal MRI axial T2 sequence without gadolinium

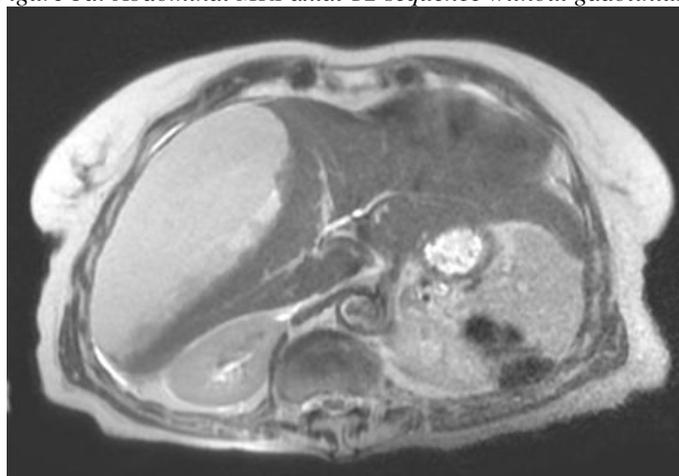


Figure 3b: Abdominal MRI axial T2 sequence without gadolinium

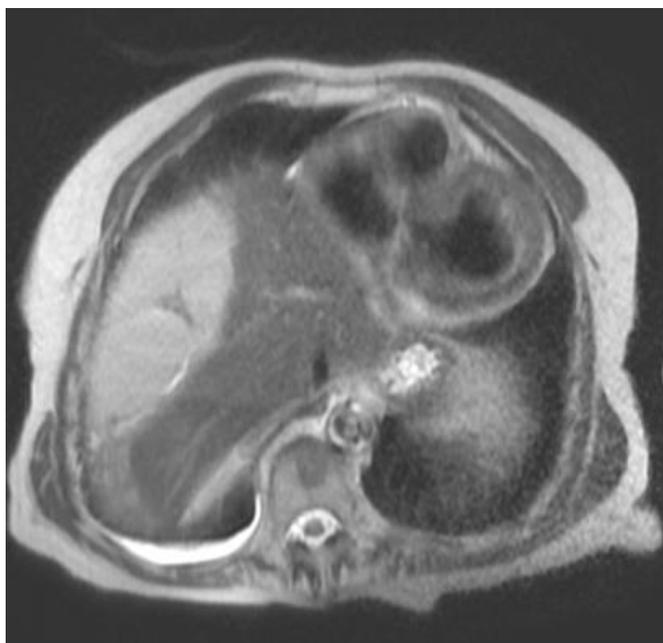


Figure 3c: Abdominal MRI axial T2 sequence without gadolinium
 Figure 3: IRM Abdominale en séquence T2 sans injection de gadolinium

Discussion

The HSCF described for the first time in 1844 by Abercrombie [1], is defined as a blood collection under the liver capsule. The secondary rupture of the hematoma is the dreaded complication responsible for a mortality rate of 50 to 75% [2]. Spontaneous HSCF is a rare entity that occurs most often in the context of HELLP syndrome (haemolysis, Elevated Liver enzyme -Low Platelet count), defined by the combination of hemolysis, elevated liver enzymes and one of thrombocytopenia. During this condition, the incidence of HSCF is 0.9 % [3]. The pathophysiology is poorly understood, but it is partly explained by microangiopathic syndrome with hemolysis [4].

Coagulation disseminated intravascular there is often associated. These coagulation abnormalities, localized in the liver, may lead to hepatic necrosis and spontaneous bleeding initially contained by the liver capsule and rupturable secondarily [5]. Other secondary etiologies, rare, responsible for the spontaneous HSCF have been described in the literature: amylose, rupture of hepatocellular carcinoma, rupture of focal nodular hyperplasia, hepatic hemangioma and liver metastases [6]. The table in HSCF usually involves two successive evolutionary phases [7]:

- The development of a HSCF which distends the capsule: This phase is of sudden onset, marked by a violent epigastric pain or right upper quadrant, often accompanied by painful hepatomegaly.
- Intraperitoneal rupture HSCF: the symptoms include an exacerbation of pain, hemorrhagic shock and cardiovascular collapse signs.
- Abdominal ultrasound is needed first, it confirms the presence of a suspect HSCF and a crack in an intraperitoneal effusion associated.
- Liver CT allows an assessment to better liver damage, their headquarters and their extent.
- MRI has no interest in an emergency setting, but can be useful in the secondary detection of possible causative lesions. Its implementation should not delay the therapeutic action.
- The management depends on the integrity of the HSCF and obeys the rules of conventional liver surgery. When HSCF is not broken, abstention is the rule and we only medical treatment and ultrasound monitoring or scanning appliance will be taken. [8] Surgical treatment finds its indication in case of pre rupture or rupture of the hematoma. After evacuation of the hematoma, hemostasis is achieved by means as conservative as possible: the packing or tamponade from different hemostatic substances [9]; in case of failure, the use of ligation of the hepatic artery or one of its branches was described [10]. Arterial embolization remains a non-surgical method to shorten the period of hospitalization and reduce mortality [8]. In the case of our patient, non-surgical treatment was recommended, since imagery showed no signs of pre-rupture, and the patient remained stable hemodynamically.

Conclusion

Idiopathic spontaneous HSCF is a rare condition. The clinical picture is kind of specific; the diagnosis is mainly based on imagery means. The management is not well defined because of the rarity of this entity in literature. The therapeutic arteriography is a promising examination reduces mortality compared to other surgical procedures.

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