

Sub-Capsular Hematoma of the Liver Complicating Preeclampsia

Khalloufi C*, Kawtari S, Jalal M, Lamrissi A and Bouhya S

Department of Gynecology, University Hospital Center, Ibn Rochd Casablanca, Morocco

*Corresponding author:

Khalloufi Chadia,
Department of Gynecology, University Hospital
Center, Ibn Rochd Casablanca, Morocco,
Tel: +212670663920;
E-mail: khalloufi.chadia@icloud.com

Received: 09 Nov 2022

Accepted: 12 Dec 2022

Published: 19 Dec 2022

J Short Name: AJSCCR

Copyright:

©2022 Khalloufi C, This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially.

Citation:

Khalloufi C. Sub-Capsular Hematoma of the Liver Complicating Preeclampsia. *Ame J Surg Clin Case Rep.* 2022; 6(3): 1-3

Keywords:

Subcapsular liver hematoma; Preeclampsia;
Pregnancy; Favorable evolution

1. Abstract

Subcapsular hematoma of the liver (SCLH) is defined as an anatomical-clinical entity corresponding to the appearance of a hematic collection located between the intact GLISSON capsule and the hepatic parenchyma. It is a rare complication of pregnancy with a high maternal-fetal mortality, occurring most often in the context of pre-eclampsia or HELLP syndrome (Hemolysis, Elevated Liver Enzymes, and Low Platelets Syndrome). We report the case of a 25-year-old parturient, primiparous woman, with no previous history, admitted to the emergency room for shock in a 29-week amenorrhea pregnancy. Ultrasound examination revealed a ruptured sub capsular hematoma of the liver. An urgent surgical exploration was required, during which a rupture of the subcapsular hematoma of the liver was revealed, accompanied by a state of hemorrhagic shock. The management consisted in a polytransfusion with suture of the hepatic lesion without paking. The evolution was favorable with clinico-biological normalization and the patient was declared discharged at D10 of her hospitalization.

2. Introduction

Subcapsular hematoma of the liver (SCLH) is a rare but serious complication of pregnancy, with an estimated incidence of 1/45,000 to 1/225,000 births. The diagnosis must be rapid and the management adapted to this serious and fatal pathology for both the mother and her child [1,2]. Its prognosis is poor, it is associated with an important maternal and fetal mortality, the picture is often characterized by a hemorrhagic shock [3]. We report the case of a patient whose HSCF was ruptured.

3. Case Report

Patient aged 25 years, I gesture, I pare, pregnant of 29 weeks of amenorrhea, without history, was admitted to the emergency room,

minimal black bleeding, clinical examination: patient conscited, BP: 10/6 FC: 120batt/min, proteinuria to + + + to the labstix, with uterine contracture, preceded 3h by vomiting with pain of the right hypochondrium. The obstetrical ultrasound showed a non-progressive mono-fetal pregnancy. The hepatic ultrasound revealed: an aspect in favour of a sub capsular hematoma of the right liver in the process of liquefaction associated with an effusion of medium abundance. The biology showed a complete hellp syndrome (AST: 327 IU/L, ALT: 96 IU/L, LDH: 327). The blood count showed a platelet count of 86,000 cells/mm³, hyperleukocytosis of 17,760/mm³ with a hemoglobin of 8.7 g/dl. The prothrombin level was 75%. INR was 1.5. Creatinemia at 15 mg / l, blood urea at 0.28 mmol / l, creat: 7.9. In view of the clinical and biological context, an upper tract exploration was performed. In the operating room, the patient was under GA, the management consisted of a vascular filling with saline, transfusion of a red blood cell, 2PFC and 6CP. At the surgical exploration, a hemoperitoneum of great abundance was aspirated, a caesarean section was performed allowing the extraction of a stillborn baby, sex M, weight: 900g. Artificial delivery revealed a cup of PRH. At the hepatic exploration after enlargement of the incision in median: hematoma under capsular of the liver, taking all the right lobe broken with a blood clot, from where the realization of hepatic sutures of hemostasis then the patient benefited from a peritoneal washing. The evolution was marked at day 5 of the post-op by the normalization of the biological balance, so a control ultrasound to objectified: a quasi stable aspect of the sub capsular hematoma of the liver, with disappearance of the peritoneal effusion. The patient was declared discharged on day 10 of the post-op.

4. Discussion

Subcapsular hematoma of the liver (SCLH) is defined as an

anatomical-clinical entity corresponding to the appearance of a hematic collection located between the intact GLISSON capsule and the liver parenchyma. The incidence of HSCF during pregnancy varies between 1/40,000 and 1/250,000 pregnancies [2]. It is most often associated with pre-eclampsia or Hellp syndrome, rarely with acute steatosis gravidarum [4]. This complication mainly affects women around the age of 30 with a greater predilection in multiparous and aged primiparous women. It apparait in the third trimester in 60% of cases, although this complication reveals itself before labor, 15% of cases were reported in the immediate postpartum period. The diagnosis of HSCF is difficult, it must be evoked in case of pain of the right hypochondrium or epigastrium with or without vomiting, with or without jaundice in a context of hypertension [5]. However, subcapsular hematoma of the liver is frequently covered when the clinical picture is complicated by hemorrhagic shock, which is the case in our patient [1]. In the face of non-specific clinical symptoms, the diagnosis is essentially based on imaging methods. Thus, hepatic ultrasound is systematically performed in the presence of this clinical picture, showing a heterogeneous image that is hypoechoic in relation to the rest of the parenchyma [9]. The association with an intraperitoneal effusion makes one suspect a fissure or even a rupture of the hematoma [6]. In addition, hepatic ultrasound allows, in case of surgical abstention [7, 11]. The use of CT or MRI, although more efficient for hepatic exploration, is rarely used in practice given the urgency of the clinical picture. Hepatic angiography is therefore rarely considered in an emergency [6, 10]. In the case of a ruptured HSCF, the management was initially an emergency caesarean section for fetal extraction [2, 13]. Thus, the management of HSCF is well codified and includes packing or tamponade with different hematic substances, ligation of the hepatic artery or one of its branches, arterial embolization and hepatic transplantation [8, 12]. Thanks to these different techniques, the mortality rate of ruptured subcapsular hematoma of the liver decreased from 70% in 1960 to 10% in the 1990s [2, 14] (Figure 1).

In the African environment, due to the absence of surgical techniques necessary in the management, the prognosis of the ruptured subcapsular hematoma of the liver remains pejorative. Five cases of death out of eight patients with a subcapsular hematoma of the liver, four of which were caused by rupture of the hematoma, were reported by EL Youssfi and All the diagnosis of HSCF should ideally be made before the rupture, the priority of which is for the obstetrician to ensure uterine evacuation as soon as possible The present observation shows the interest of performing an abdominal ultrasound in front of signs of call [5, 15].

5. Conclusion

Subcapsular hematoma of the liver is a rare and serious complication responsible for high maternal-fetal mortality. Faced with an often non-specific clinical symptomatology and a

delayed biological picture, its diagnosis is based essentially on imaging means (ultrasound, CT, MRI). Its treatment depends on the integrity or not of Glisson's capsule. Its management requires rapid coordination between the obstetrician, the resuscitator, the pediatrician the resuscitator, the pediatrician, the visceral surgeon and even the interventional radiologist. It essentially involves resuscitation measures and fetal extraction by cesarean section.

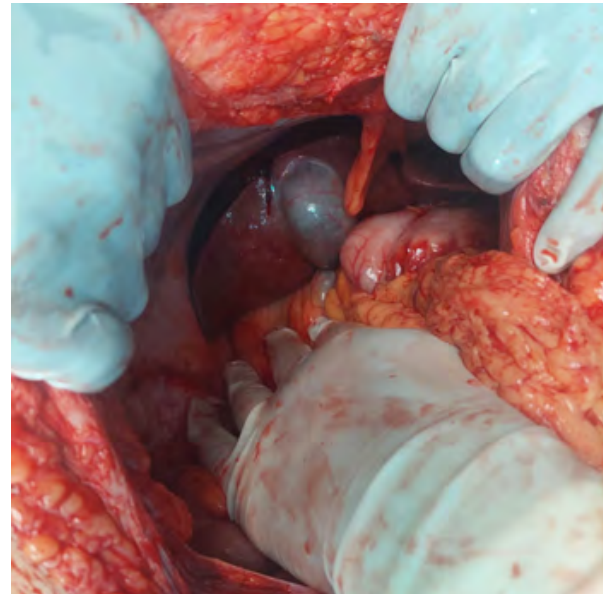


Figure 1: Sub capsular hematoma of the right lobe of the liver.

6. Conflict of Interest

None

References

1. Rinehart BK, Terrone DA, Magann EF, Martin RW, May WL, Martin Jr JN, et al. Preeclampsia-associated hepatic hemorrhage and rupture: mode of management related to maternal and perinatal outcome. *Obstet Gynecol Surv.* 1999; 54: 196-202.
2. Wicke C, Pereira PL, Neeser E, Flesch I, Rodegerdts EA, Becker HD, et al. Subcapsular liver hematoma in HELLP syndrome: evaluation of diagnostic and therapeutic options-a unicenter study. *Am J Obstet Gynecol.* 2004; 190: 106-12.
3. Wicke C, Pereira PL. Subcapsular hematoma of the liver: clinical case and update on management. *Journal of Obstetrics Gynecology and Reproductive Biology.* 2004; 41(4): 378-382.
4. Mihiu D, Costin N, Mihiu CM, Seicean A, Ciortea R. HELLP syndrome - a multisystemic disorder. *J Gastrointestin Liver Dis.* 2007; 16: 419-24.
5. Pavlis T, Aloizos S, Aravosita P, Mystakelli C, Petrochilou D, Dimopoulos N, et al. Diagnosis and surgical management of spontaneous hepatic rupture associated with HELLP syndrome. *J surg Educ.* 2009; 66(3): 163- 7.
6. Sibai BM, Ramadan MK, Usta I, Salama M, Mercer BM, Friedman SA, et al. Maternal morbidity and mortality in 442 pregnancies with hemolysis, elevated liver enzymes, and low platelets (HELLP syndrome). *Am J Obstet Gynecol.* 1993; 169: 1000-6.

7. Doumiri M, Elombila M, Oudghiri N, Saoud AT. Ruptured liver subcapsular hematoma complicating acute hepatic steatosis of pregnancy. *Pan Afr Med J.* 2014; 19:38.
8. Stevenson JT, Graham DJ. Hepatic hemorrhage and the HELLP syndrome: a surgeon's perspective. *Am Surg.* 1995; 61: 756-60.
9. Millan CA. Right hepatectomy after spontaneous hepatic rupture in a patient with preeclampsia: A case report. *Int J Surg Case Rep.* 2017; 39: 250-252.
10. Guettrot-Imbert G. [Liver diseases and pregnancy]. *Rev Med Interne.* 2015; 36(3): 211-8.
11. Lai M, Wolf JL. The Liver in Pregnancy. 2018; 308-323.
12. Kaaniche MF. [Up-to-date on the HELLP syndrome (Hemolysis, Elevated Liver enzymes and Low Platelets)]. *Rev Med Interne.* 2016; 37(6): 406-11.
13. Seren G, Morel J, Jospe R, Mahul P, Dumont A, Cuileron M, et al. HELLP syndrome and subcapsular hematoma of the ruptured liver. *Ann Fr Anesth Reanim.* 2006; 25(10): 1067-9.
14. Mufti AR, Reau N. Liver disease in pregnancy. *Clin Liver Dis.* 2012; 16(2): 247-69.
15. Chkoff S. Spontaneous idiopathic subcapsular hematoma of the liver: a case report. *J. Afr. Hepatol. Gastroenterol.* 2010; 4: 54-56.