wjpmr, 2020,6(6), 54-56

SJIF Impact Factor: 5.922

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Case Report

ISSN 2455-3301

WJPMR

# LIVER SUBCAPSULAR HEMATOMA: ABOUT A CASE

***Dr. Ouhame Hanane, Nadi Meriem, Bargach Samir and Yousfi Mounia**

Department of Gynecology Obstetrics, Cancers, and High Risk's Pregnancies Maternity Hospital of Souissi (Avicenna) – Rabat – Morocco.

***Corresponding Author: Dr, Ouhame Hanane**

Department of Gynecology Obstetrics, Cancers, and High Risk's Pregnancies Maternity Hospital of Souissi (Avicenna) – Rabat – Morocco.

**Article Received on 01/04/2020** **Article Revised on 22/04/2020** **Article Accepted on 12/05/2020**

## ABSTRACT

Liver subcapsular hematoma represents a rare and a serious complication of preeclampsia and HELLP syndrome. Hepatic capsular rupture is responsible for high maternal and fetal mortality; hence the importance of quick diagnosis and adequate multidisciplinary medical intervention. In this article we report a case of cracked subcapsular hematoma of the liver with satisfying results.

**KEYWORDS:** Pregnancy, preeclampsia, HELLP syndrome, liver subcapsular hematoma.

## INTRODUCTION

Liver subcapsular hematoma is an infrequent complication and an extremely serious preeclampsia, which occurs often with non-specific symptomatology and which leads to a delayed diagnosis. Its rupture is very serious and responsible for very high maternal and fetal mortality. In this article we report a case of cracked subcapsular hematoma of the liver with good progress.

## OBSERVATION

This case is about Mrs F.K, aged 33 years old, pauciparous, with no notable pathological history, admitted to obstetric emergencies due to a severe headache while a 35 weeks amenorrhea pregnancy poorly followed.

The admission examination showed high blood pressure 180⁄95 mm Hg accompanied by significant proteinuria on the urine strip. The obstetric examination found a uterine height of 27 cm, positive fetal heart activity and negative uterine contractions. Obstetric ultrasound has shown an evolving pregnancy with measurements corresponding to pregnancy term, sufficient quantity of amniotic liquid and a homogeneous placenta fundus.

The biological report performed in emergency showed a HELLP syndrome.

In front of this severe preeclampsia accompanied by HELLP syndrome; an emergent caesarean was indicated for maternal and fetal rescue given birth to a male newborn with Apgar 10⁄10.

During the operation, a hemoperitoneum measured at 500 cc was removed. exploration of the abdominal cavity and the hepatic level, made possible by an upper-umbilical midline incision, revealed a cracked liver subcapsular hematoma. A packing was carried out. Ablation of the packing 72 hours after a good hemostasis. The patient was transferred to intensive care for surveillance. Ultrasound examination performed and have confirmed the absence of hemoperitoneum, the absence of an increase in the size of the hematoma and the integration of the Glisson capsule. The patient was discharged after a 15 days hospital stay, showing good clinical, biological and radiological improvement. An abdominal ultrasound was scheduled 03 months after discharge but the patient didn't follow-up.

## DISCUSSION

The liver subcapsular hematoma has an estimated incidence between 1⁄45000 and 1⁄225000 births.[1,2] Even though the mortality from this complication has decreased in recent years thanks to advances in reanimation techniques and in the field of hepatic trauma, it remains nonetheless high for both the mother (1 to 24%) and for the child (6.7 to 70%).[3]

It is most often a complication of preeclampsia, whether complicated or not by eclampsia or HELLP syndrome.[4] Preeclampsia is a multi-systemic disease occurred during the third trimester of pregnancy whose origin is placental with multi-organ involvement. Liver damage is secondary to intravascular fibrin deposits located mainly at the periportal sinusoids. They initially consist of foci of hepatocytic necrosis, then of infarction and intrahepatic hemorrhage. These lesions can progress to the constitution of an intrahepatic hematoma, most often

under the Glisson capsule, and in the right lobe. The main complication is the rupture of the hematoma.[4]

The most constant clinical sign (90%) is persistent pain in the epigastrium and / or right hypochondrium, typically a lined pain, more or less associated with scapular irradiation.[5] This pain is due to the distension of the hepatic parenchyma and the Glisson capsule caused by a stasis of blood flow in the hepatic sinusoids.[6] A defense of the right hypochondrium is then found in most cases. The signs of hemorrhagic shock are observed in the case of rupture of the Glisson capsule.[5] Biliary or gastrointestinal pathology can be wrongly evoked after vomiting and thus favored a delay in therapeutically intervention.

Biology is not specific to the subcapsular hematoma of the liver but it can reveal a HELLP syndrome or disseminated intravascular coagulation.[2]

Imaging is only possible for hemodynamically stable patients. Ultrasound and abdominal computed tomography can in most cases establish the diagnosis.[7] In case of an emergency, ultrasound is easy to perform and quickly identifies the hematoma, which most often begins in the right liver in the form of a biconvex subcapsular lens.[7] The visualization of a hemoperitoneum due to a ruptured or cracked hematoma is therefore decisive in the therapeutic intervention,[2] and in the choice of the surgical approach.

The treatment must be fast and requires multidisciplinary collaboration. It includes three aspects, reanimation for the treatment of hypertension, fetal extraction and the treatment of subcapsular hematoma of the liver guided by abdominal imaging.[8] In front of clinical and biological data, our patient was directly sent to the operating room for maternal and fetal rescue. For better visibility an upper-umbilical midline incision was made to widene the pfannenstiel incision made in the first place. After evacuating the hemoperitoneum, a hematoma of the right liver was discovered with a small cracking of the liver capsule. A packing indication has been requested.

Thus, the most appropriate medical conduct allowing to give birth to a fetus as quickly as possible while avoiding the occurrence of a rupture of a subcapsular hematoma of the liver; would be to perform a Cesarean delivery in emergency. In addition, performing a cesarean delivery can allow a concomitant exploration of the hepatic level, which vaginal delivery would not allow.[8]

Regarding the choice of incision, it depends on the presence of a hemoperitoneum. In the absence of this, a transverse incision is possible. In all other cases, it is preferable to perform a median laparotomy in order to be able to carry out an adequate hepatic exploration, drainage and possible temporary packing. Secondarily, ligation of one of the branches of the portal vein may be necessary in the event of persistent bleeding and in situations where the hemorrhage is unstoppable; a lobectomy may be necessary. In very serious cases with major hepatic insufficiency, liver transplantation is the last therapeutic solution.[3]

The use of a laparoscope introduced by the cesarean incision, has been described recently, and could be considered as an alternative to performing a median laparotomy in order to carry out a satisfactory exploration of the hepatic level.[4] However, this special care cannot escape the essential advice of visceral surgeons.

If the subcapsular hematoma of the liver occurred postpartum, an abdominal and pelvic computed tomography should be performed to diagnose the hematoma and specify whether or not it has ruptured.[4] In this case, the hemodynamic state which directs the therapeutic attitude; either a conservative treatment with correction of coagulation disorders and blood transfusion or a median laparotomy with techniques already mentioned.

## CONCLUSION

Subcapsular hematoma of the liver, occurring along with the HELLP syndrome is a rare and serious complication requiring quick and adequate multidisciplinary intervention of a team of the obstetrician, the resuscitator, the radiologist, the pediatrician and the visceralist.

## REFERENCES

1. Reinehart BK, Terone DA, Magann EF, Martin RW, May WL, Martin Jr JN. Preeclampsia-associated hepatic hemorrhage and rupture: mode of management related to maternel and perinatal outcome. Obstet Gynecol surv, 1999; 54: 196-202.
2. Wicke C, Pereira PL, Neeser E, Flesch I, Rodegerdts EA, Becker HD. Subscapular liver hematoma in HELLP syndrome evaluation of diagnostic and therapeutic options- a unicenter study. Am J obstet gynecol, 2004; 190: 106-12.
3. P. Berveiller, L. Vandenbroucke, T. Popowski, R. Afriat, E. Sauvanet, Y. Giovangrandi: Hepatic subscapular hematoma: A case report and management update journal of gynecology obstetric and biology of reproduction, 2012; 41: 378-382.
4. Taheri H, et al. L'hématome sous-capsulaire du foie rompu. À propos de 3 cas. Anesth Reanim, 2015.
5. Paulis T, Aloizos S, Aravosita P, Mystakelli C, Petrochilou D, Dimopoulos N et al. Diagnosis and surgical management of spontaneosus hepatic rupture associated with help syndrome. J surg educ, 2009; 66: 163-7.
6. Araujo AC, Leao MD, Nobrega MH, Bezerra PF, Pereira FV, Dantas EM, et al. Characteristics and treatment of hepatic rupture caused by help syndrome. Am j obstet gynecol, 2006; 195: 129-33.

7. Nunes JO, Turner MA, Fulcher AS. Abdominal imaging features of hellp syndrome: a 10 years retrospective review. AJR Am J Roentgenol, 2005; 185: 1205-10.
8. A. Abida, J. Meddah, M. El Youssfi, and S. Bargach. Hématome sous capsulaire du foie : A propos d'un cas. International Journal of Innovation and Applied Studies ISSN 2028-9324, 2018; 23(4): 700-704.