# Shoulder tip pain, the call for HELLP?

## A case of subcapsular liver haematoma

**Stewart B[1], Kane SC [1, 2]**

1 The Royal Women's Hospital, Parkville, Victoria. 2 The University of Melbourne, Dep't of O&G, Parkville, Victoria.

## Background

Subcapsular liver haematoma is a relatively rare but potentially life-threatening pathology that can occur in pregnancies complicated by HELLP syndrome (haemolysis, elevated liver enzymes and low platelets).[1] Clinical presentation is varied and may mimic pulmonary embolus or cholecystitis.[2] Management is often conservative unless haemodynamic instability suggests hepatic rupture.[2]

## Case

We present the case of a 30 year old G2P2 woman who presented 10 days post partum with right shoulder tip pain. She had undergone induction of labour for HELLP at 34 weeks' gestation, resulting in the vaginal birth of a 2284 g male infant complicated by a post partum haemorrhage of 1000mL. The patient had been clinically well on initial discharge following transfusion of three units of packed red blood cells.

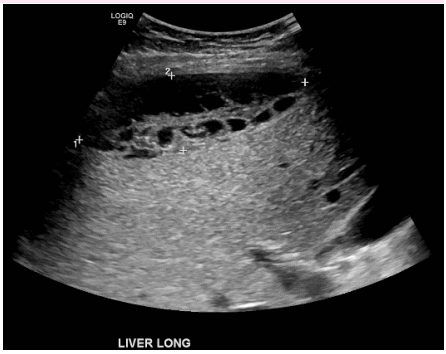


**Figure 1.**
*Ultrasound shows a lentiform, loculated fluid collection (11.3 x 9 x 3cm) consistent with a subcasuplar liver haematoma.*

On re-presentation, her vital signs and haemoglobin were stable and coagulation profile normal. A CTPA identified a right middle lobe subsegmental pulmonary embolism and therapeutic anticoagulation was commenced. This was promptly ceased upon diagnosis of an 11 cm subcapsular liver haematoma on upper abdominal ultrasonography (Figure 1), performed to investigate hepatic irregularity identified on the CTPA (Figure 2).

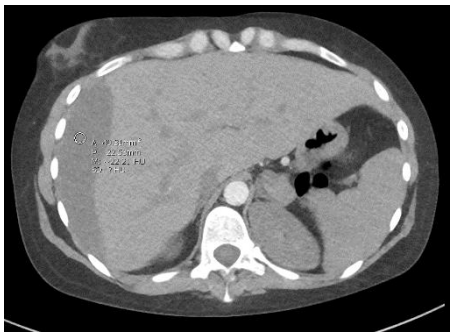

**Figure 2.**
*CT scan shows a large subcapsular collection in the right lobe of the liver.*

On balance, the risk of morbidity from haematoma expansion and potential rupture in the setting of anticoagulation was considered higher than potential extension of the pulmonary embolus, especially as bilateral lower limb Doppler studies excluded venous thrombosis.

In the context of haemodynamic stability, the haematoma was managed conservatively with close surveillance in a high acuity unit, supportive intravenous fluid therapy and prophylactic antibiotics. The patient has made a full recovery.

## Discussion

Subcapsular liver haematoma may present with non-specific symptoms. The high risk of venous thromboembolism in the post partum period can be a complicating consideration. This case identifies the importance of clinical suspicion of an infrequent but potentially fatal complication of HELLP syndrome. Despite the frequency of conservative management, early identification remains important to guide management decisions that affect prognosis.

## References

1. Nelson-Piercy CP. Handbook of Obstetric Medicine. 5th ed. Boca Raton: Taylor & Francis Group; 2015.
2. Ditisheim A, Sibai BM. Diagnosis and management of HELLP syndrome complicated by liver haematoma. Clin Obset Gynecol. 2017: 60; 190 – 197.