

A case report of acute fatty liver in pregnancy

T Aitken, R Hall, T Pettigrew. Queen Elizabeth University Hospital, 1 245 Govan Road, Glasgow, G51 4TF



Introduction:

Acute fatty liver in pregnancy (AFLP) is a rare obstetric emergency, occurring in approximately 5 in every 100,000 births in the UK. Non-specific symptoms can make diagnosis challenging, and it is associated with a perinatal mortality of between 20 and 50%. We present a case of a patient with AFLP and discuss its diagnosis and management.

Case Report:

- 35yr primigravada presents at 35+2
- PMH: polymyalgia, PCOS, migraine, BMI 20
- Abdominal pain, vomiting, increased thirst (drinking 6-8L/ day), reduced fetal movements
- O/E: tachycardic and exquisitely tender abdomen
- Initial impression: threatened pre-term labour

Hb	120	Bil	55
WCC	14.4	ALT	408
Plat	234	AST	518
Na ⁺	129	Alk Phos	438
K ⁺	4.5	Albumin	23
Ur	3.9	PT	17
Cr	176	Thrombin Time	22
eGFR	29	Fibrinogen	1.10
Glucose	2.9	Paracetamol	18

Table 1: Blood results on admission

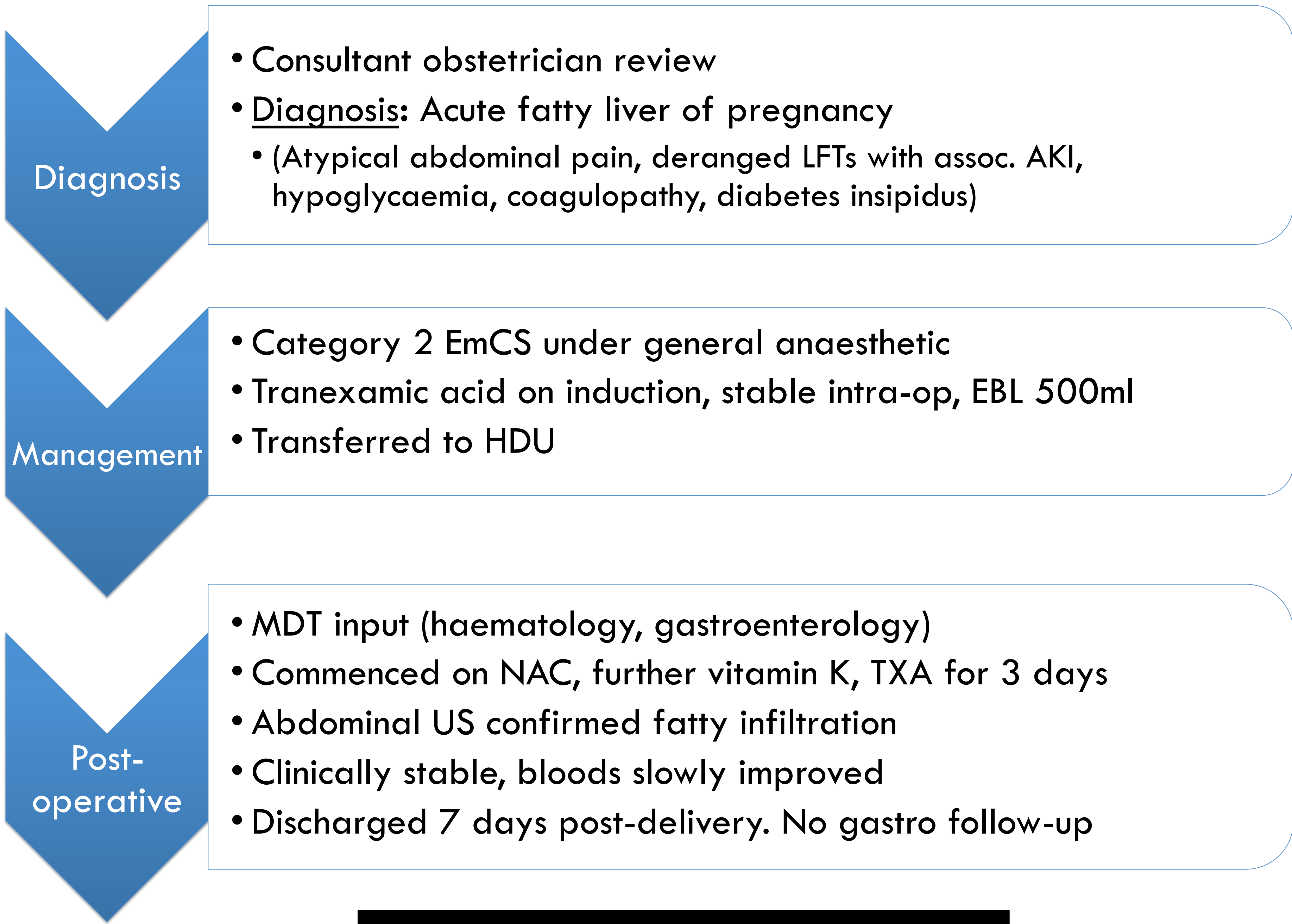


Figure 1: Abdominal USS confirming fatty liver

Discussion:

AFLP typically presents in the third trimester or early in the postpartum period. Risk factors include primigravidas, multiple pregnancies, low BMI and male babies. AFLP may be a variant of pre-eclampsia however it typically presents more acutely. Diagnosis may be difficult due to non-specific symptoms and differentials include acute hepatitis, HELLP syndrome and obstetric cholestasis. Investigations demonstrate a transaminitis, hyperbilirubinaemia, hypoglycaemia, leukocytosis and coagulopathy. Disseminated intravascular coagulopathy occurs in approximately 75% of patients and acute renal failure may complicate severe cases. Thrombocytopenia is less common than in HELLP syndrome, however coagulopathy usually precludes regional anaesthesia. Ultrasound may demonstrate fatty infiltration of the liver, however false negatives are common. Management of AFLP is supportive and expeditious delivery due to high fetal mortality. Pre-operative management involves treatment of hypoglycaemia and correction of electrolyte and coagulation abnormalities. Patients may deteriorate in the postpartum period and should therefore be managed in a HDU/ ITU setting.

Conclusion and Key Points:

- Acute fatty liver of pregnancy is a rare obstetric emergency
- Usually presents acutely with deranged liver function tests and associated coagulopathy and hypoglycaemia
- Current management is supportive and expeditious delivery
- Multidisciplinary team approach to management
- Patients may deteriorate in the post-partum period

References:

• Griffiths S, Nicholson C. Anaesthetic implications for liver disease in pregnancy. *BJA Education*. 2016; 16: 21-25

• Ko H, Yoshia EM. Acute fatty liver of pregnancy. *Can J Gastroenterol*. 2006; 20: 25-30