PIPADOR REVISION

MRCOG Part 1 Revision Notes

Acute Fatty Liver of Pregnancy

PATHOLOGY • LECTURE 332

VISUAL EXAMINATION REVISION NOTES

2026 Edition

MRCOG PART 1 REVISION NOTES | PATHOLOGY

332 Acute Fatty Liver of Pregnancy

Pathogenesis, pathology, diagnosis (Swansea), differentiation from HELLP and management

≈ 1 in 10,000–20,000	Micro- vesicular	Hypo- glycaemia	Deliver
Pregnancies	Steatosis	Key distinguishing feature	Definitive treatment

■ KEY FACTS: Learning objectives

- Describe the pathology and pathogenesis of acute fatty liver of pregnancy (AFLP), including the fetal LCHAD link.
- Describe clinical features, Swansea criteria and differentiation from HELLP.
- Describe management and neonatal testing.

332.1 Pathogenesis and pathology

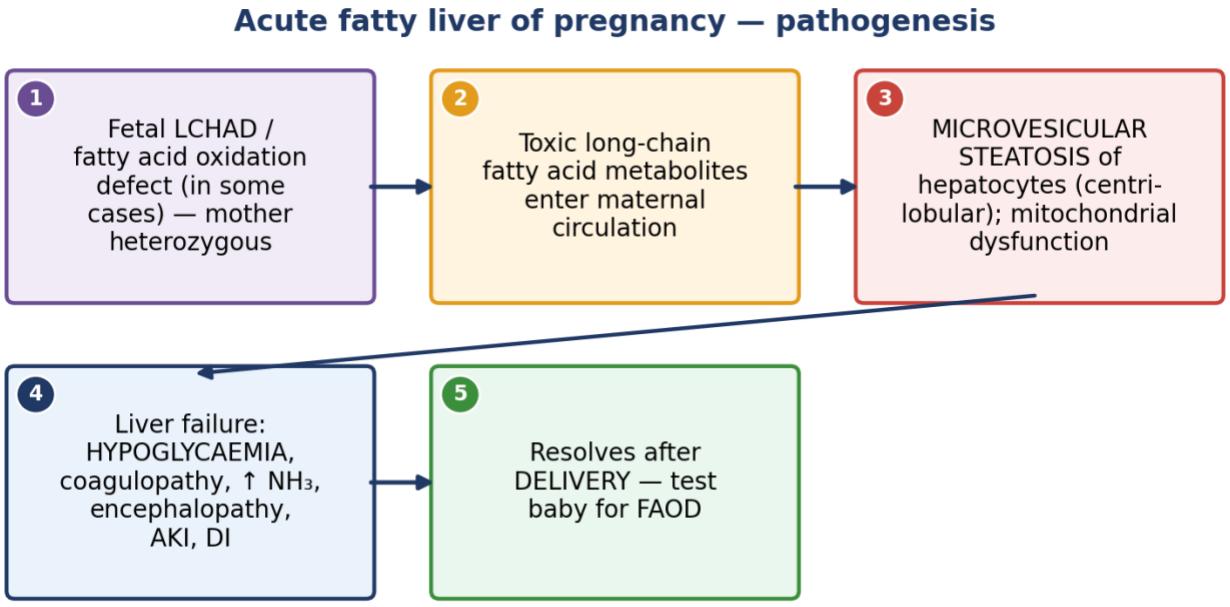


Figure 332.1 — Pathogenesis of AFLP

- Histology: swollen pale hepatocytes with **microvesicular fat** (Oil Red O stain on frozen section), central nuclei, minimal necrosis/inflammation — biopsy rarely needed (coagulopathy).
- Risk factors: **3rd trimester**, primiparity, **twins**, male fetus, low BMI, pre-eclampsia, fetal FAOD.
- Mitochondrial β-oxidation failure explains hypoglycaemia, raised ammonia and lactic acidosis (Lecture 219).

332.2 Clinical features and diagnosis

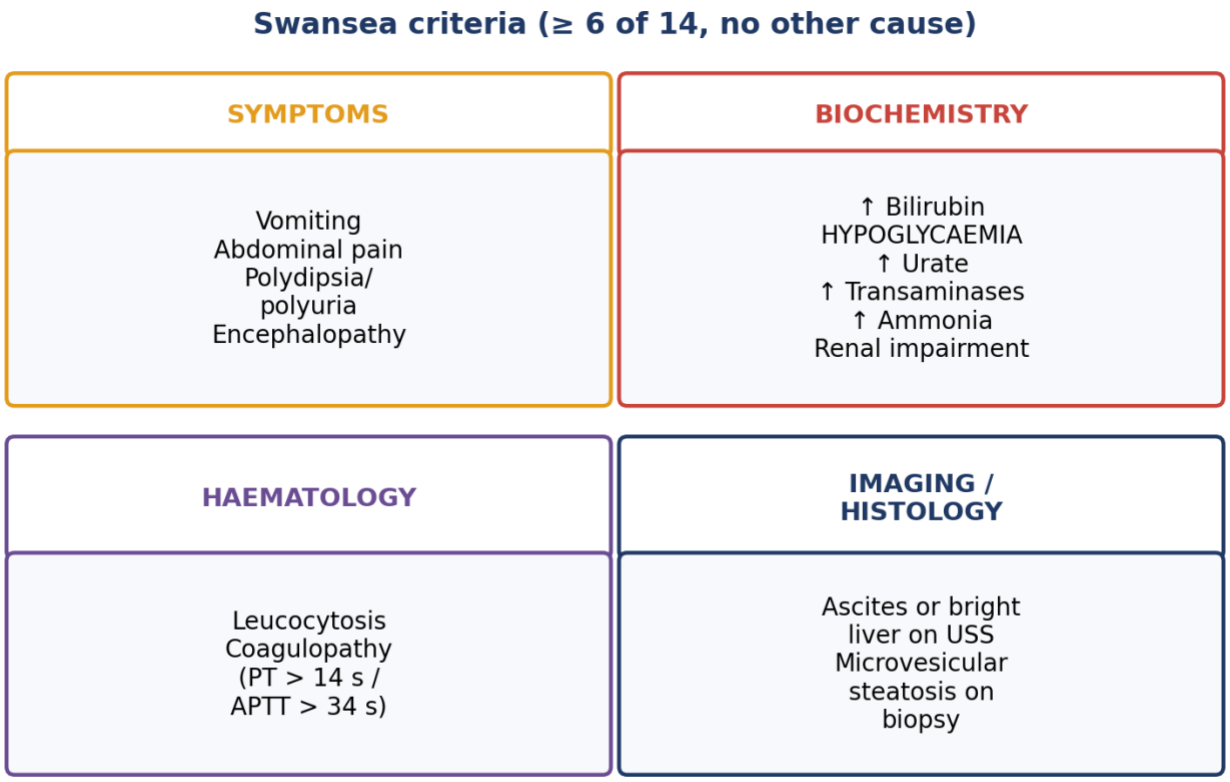


Figure 332.2 — Swansea criteria

Feature	AFLP	HELLP
Hypoglycaemia	Common	Rare
Coagulopathy (↑ PT, ↓ fibrinogen)	Marked (liver failure)	Mild unless DIC
Hypertension/proteinuria	≈ 50%	Usual
Platelets	Mildly ↓	Markedly ↓
Bilirubin, ammonia, renal failure	↑↑	Less
DI (polyuria/polydipsia)	May occur (↓ vasopressinase clearance)	Rare

332.3 Management

- **Stabilise and deliver promptly** (regardless of gestation), usually by CS once coagulopathy corrected (FFP, cryoprecipitate, platelets).
- **Glucose infusion** with frequent monitoring; manage encephalopathy, AKI, hypoglycaemia in **ICU**; liver unit referral; rarely liver transplant.
- Postpartum haemorrhage risk high; recovery usually within days–weeks.
- **Test the baby for fatty acid oxidation disorders (LCHAD)** — and counsel for future pregnancies.

332.4 Must-know summary

■ EXAM TIP

- Microvesicular steatosis from mitochondrial β-oxidation failure; fetal LCHAD link.
- Vomiting, abdominal pain, jaundice, **hypoglycaemia**, coagulopathy, AKI, encephalopathy; Swansea ≥ 6.
- Deliver; correct coagulopathy; glucose; ICU.
- Screen neonate for LCHAD deficiency.

■ MNEMONIC / MEMORY AID

AFLP — 'Fat Liver, Low sugar, Lousy clotting'.