

TRANSAMINASE PROTOCOL

Most patients with persistently elevated ALT have fatty liver disease due to **alcohol +/- obesity +/- diabetes +/- hyperlipidaemia**

STEP 1

- Alcohol. If intake > 14U/week insist that patient abstains completely.
- Drugs. Stop any medications that may be relevant.

... then recheck the LFTs in 3-4 weeks.

STEP 2: if transaminases still abnormal

- ❖ Organise a liver screen:
 - Weigh the patient and calculate BMI. (BMI>25 is *abnormal* and disease-associated.)
 - Hep B and Hep C serology
 - Autoantibodies
 - Ferritin, Alpha-1-antitrypsin
 - Caeruloplasmin if patient aged under 35y
 - Glucose, Fasting lipids
 - FBC, INR
 - If ALT persistently more than twice normal, liver ultrasound. (Not everyone needs ultrasound).

Interpretation:

Make a diagnosis of **fatty liver disease** if:

- HepB, HepC, ferritin, alpha-1-antitrypsin (and caeruloplasmin if age<35) are normal
- Negative ANF, antimitochondrial and smooth muscle antibodies
- Normal platelet count and INR
- Normal albumin
- There is a reasonable cause such as obesity, alcohol, diabetes, hyperlipidaemia
- If ultrasound performed, there should be no splenomegaly and the liver should be either "fatty" (echogenic) or normal
- Transaminases are below 100 and there is no progressive deterioration.

REFER if with time:

- ALT > 100
- elevated bilirubin
- hypoalbuminaemia
- INR > 1.2

Obese, age>45 with NIDDM at higher risk of NASH and progression to cirrhosis)