Vale of York Clinical Commissioning Group

Referral Support Service

General Surgery

GS04
Upper GI topic: Suspected Liver Disease

Definition

NAFLD (Non-Alcholic Fatty Lever Disease) – Hepatic manifestation of the metabolic sybdrome. Most common cause of abnormal LFT's in developed countries and is thought to effect 40-70% of patients with Type II diabetes. Risk factors include insulin resistance (impaired fasting glucose or diabetes), age, obesity, smoking and persistently raised ALT.

Exclude Red Flag Symptoms

- Jaundice
- Signs of hepatic decompensation (acites, coagulopathy, flap/encephalopathy, low albumin)
- Admission or urgent referral indicated if the above present

Management

Asymptomatic LFT abnormalities

Causes

- Alcohol excess – LFT's should be considered in all patients with hazardous drinking behavior
- Obesity and progression to NAFLD
- Chronic hepatitis B and C infection
- Medication – statins are a common cause of abnormal LFT's however they don't cause liver injury

Initial management

- Mildly elevated LFT's do not require secondary care referral but if >3x normal limit then referral or advice from gastroenterology should be considered.
- Manage lifestyle factors – BMI, alcohol, medication (including herbal remedies), discuss risk factors for hepatitis.
- Repeat in 3-6 months

After 3-6 months:

- **Raised isolated Bilirubin**
  - Gilberts syndrome if Hb normal – Reassure and give PILS leaflet
  - Haemolysis if Hb low and consider Haematology referral
- **Raised ALP**
  - Confirm hepatic origin by confirming raised gamma GT

  - Perform USS and autoimmune/immunoglobulin screen
    - If abnormal – refer
    - If normal repeat LFT's at 6 weeks and refer if ALP>1.5x upper limit otherwise watch and wait.
- **Raised transaminases +/- ALP**
  - Perform **USS and Liver screen**
    - FBC, U&E, glucose, lipids, bone profile, ferritin, coagulation, coeliac screen, hepatits serology, Autoimmune/immunology screen, alpha 1 antitrypsin, caeruloplasmin (excludes Wilson's disease).

  - If **alcohol excess** and liver screen negative consider referral to alcohol team
  - Suspected **NAFLD** – refer if diabetic and BMI>28 and/or AST:ALT ratio>0.8. Otherwise review annually and promote healthy lifestyle
  - **Hepatitis B** positive – refer
  - **Hepatitis C** positive
    - Perform Hep C viral load
      - If positive – refer
      - If negative – repeat at 3 months and if still negative reassure that infection has cleared, no need to refer
  - **Ferritin** >500 perform iron studies and if iron saturation>65% then refer, if not consider alternative cause
  - Refer if **coeliac positive, alpha 1 antitrypsin low, anti-smooth muscle antibody or anti-mitrochondrial antibody positive, raised IgG or IgM** or if there is **no obvious cause.**
  - Also refer if there is pre-existing liver disease and the clinical picture has changed

Referral Information

Information to include in referral letter

- Alcohol and presence of obesity with results of investigations to-date.
- Relevant past medical / surgical history
- Current regular medication
- BMI/ Smoking status

Investigations prior to referral

As above

Patient Information Leaflets/ PDAs

http://www.patient.co.uk/health/gilberts-syndrome
http://www.patient.co.uk/health/liver-function-tests
http://www.patient.co.uk/health/hepatitis-b

References

1) https://rms.Kernow.nhs.uk

2) Godlee (2011). NAFLD. BMJ 343, 4652
3) Ainste *et al* (2011). How big a problem is NAFLD. BMJ 343, 3897
4) Bhala *et al* (2013).How to tackle rising death rates of liver disease. BMJ 346, f807.