## NAFLD Management Pathway in Secondary/Tertiary Care

Patients with NAFLD referred due to raised Non-Invasive Score (FIB-4/NFS/ELF)
Patients referred due to abnormal scan
Patients referred due to abnormal LFTs
Patients referred due to raised Ferritin

In addition, see EASL-EASD-EASO Clinical Practice Guidelines for the management of non-alcoholic fatty liver disease (2016)

<u>Initial assessment:</u>
Alcohol history
Metabolic risk profile:

- Age
- BMI and waist circumference (but note possibility of 'lean NAFLD')
- BP
- RBG/known DM?
- Lipid profile (inc HDL-C, TGs)

Exam:

- Signs CLD
- Liver/spleen

Investigations:

- Exclude other causes of liver diseases if not done in Primary Care
- Bloods for non-invasive scores if not done
- Transient elastography (TE)
- U/S
- HOMA IR can be used in non-diabetics as a surrogate estimate of insulin resistance

Use of non-invasive scores:
FIB4 intermediate or high or Transient Elastography Med ≥7.9 (M Probe) or ≥7.2 (XL Probe) -> liver biopsy to stage disease

<u>Management Plan;</u>

Lifestyle advice – weight loss (aiming for 10% ideally in gradual, sustainable way), diet, exercise (see NICE 'Preventing excess weight gain' Guidelines 2015)

Advice to keep alcohol consumption well within recommended limits.

Address all features of Metabolic syndrome present, assess cardiovascular disease risk and enquire about potential OSA.

Education about relationship between NAFLD and MetS and Cardiovascular disease

Education about NAFLD, assessment of stage of disease risks of disease progression

Role of liver biopsy:
If non-invasive scores suggest possible significant fibrosis, U/S guided liver biopsy (if otherwise clinically appropriate).
If suggestion of additional/alternative diagnosis (pattern of LFTs, liver screen results, scan appearances)

**Management**
Steatosis only – education as above and lifestyle advice
Discharge with GP monitoring and reassessment with NI scores at 5yrs, or sooner if become diabetic.

NASH with mild fibrosis (F1-2) - education as above and lifestyle advice
Treat elements of MetS (use of statins according to CVD risk)
Offer Clinical Trial interventions
Re-stage disease in 2 yrs
Consider repeat biopsy at 5yrs (depending on evolution of non-invasive markers)

NASH with moderate or severe fibrosis - education as above and lifestyle advice
Treat elements of MetS (use of statins according to CVD risk)
Offer Clinical Trial interventions
Re-stage disease annually (TE, NI scores)
U/S annually
Consider repeat biopsy at 3 years

NASH Cirrhosis - education as above and lifestyle advice
Treat elements of MetS (use of statins according to CVD risk)
Cirrhosis surveillance (U/S, AFP, OGD, DEXA)
See NICE Guidelines on Cirrhosis 2016
Offer Clinical Trial interventions if available

Interaction with Obesity Services:

Patients with Morbid obesity should be encourage to be referred to a Community Weight Management Programme

Patients with BMI>35 and T2DM and related co-morbidities are within NICE approved criteria for consideration of Bariatric Surgery and should be referred initially to a Tier 3 Obesity Service for further management/assessment

BMI >35 with moderate or greater fibrosis education as above and lifestyle advice
NB Stage of NASH is not currently an accepted indication for bariatric surgery, but such patients are at high risk of progressive liver disease and increased liver-related mortality

# Primary Care Recommendations for Referral - NAFLD Pathway

(for patients age >35)