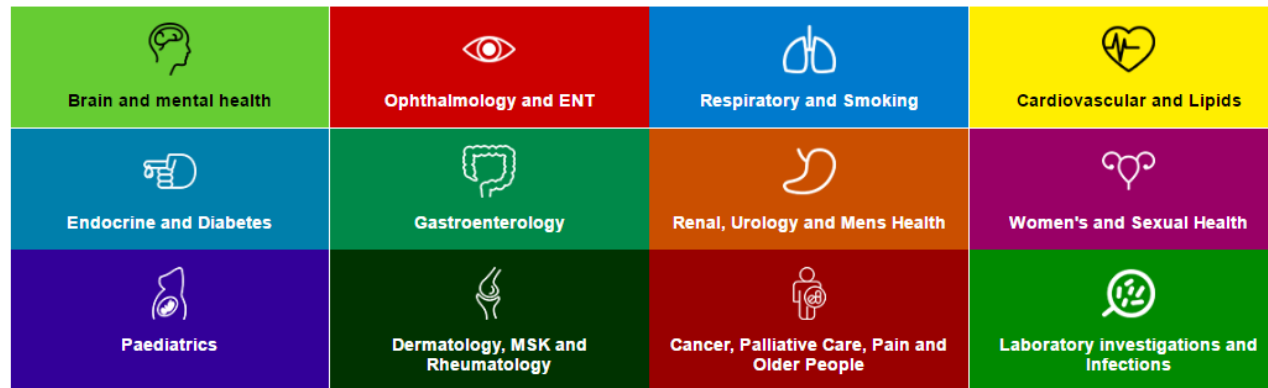


LFT and dyspepsia pathways – BEST website

- Dyspepsia pathway
- LFT pathway
- FIB 4 calculator



Review of Medications:

Withdraw or change drugs known to aggravate dyspepsia eg NSAIDs, SSRIs, anti-platelets, bisphosphonates.

Consider long term PPI for regular NSAIDs or SSRIs (especially in over 65's)

Lifestyle advice:

Smoking, alcohol, coffee, fatty foods, weight reduction, raise bed head, do not eat at bedtime

Un-investigated dyspepsia

No alarm features

Dyspepsia symptoms

Epigastric pain/ early satiety/ bloating/belching/nausea/vomiting

Alarm features :

Upper abdominal mass/ Dysphagia
Age 55 or over Wt loss and any of:
Dyspepsia/ Reflux/ Upper abdominal pain/ Persistent continued vomiting

1. Review of medications
2. Lifestyle advice
3. Antacids (gaviscon/peptac)

Full dose PPI for 4 weeks

if still symptomatic

H.Pylori Stool antigen test

No PPI for 2 weeks before testing

If symptoms controlled,

review regularly and encourage stepping down or stopping of PPI

H. Pylori Positive

H. Pylori Negative

Stepping down to use the lowest possible dose of PPI for the shortest duration

No PPI for 2 weeks before testing

review regularly and encourage stepping down or stopping of PPI

H. Pylori Positive
Treat with triple therapy
Check allergy status & interactions
see Barnsley Antimicrobial guidelines

H. Pylori Negative
consider
Changing PPI
H2RA- ranitidine
Amitriptyline low dose
Non-urgent gastroscopy

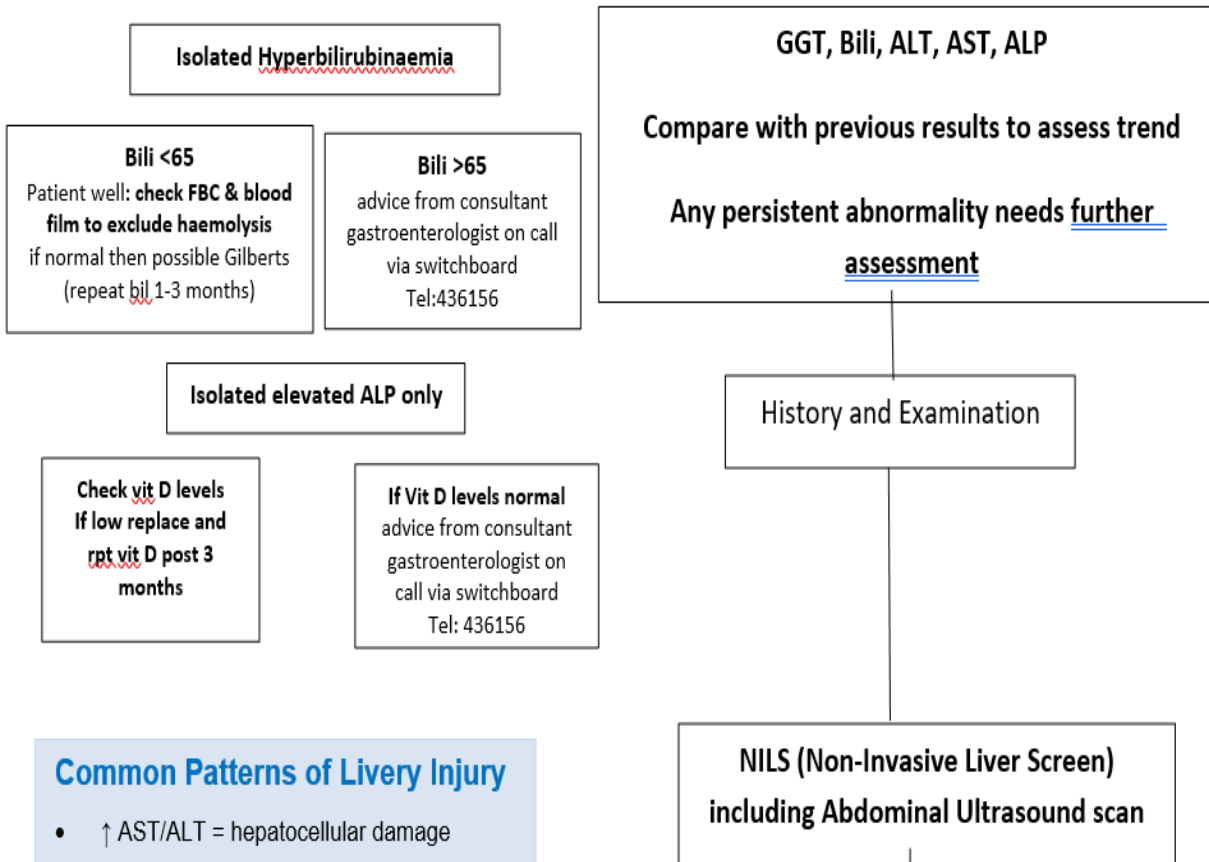
Stepping down to use the lowest possible dose of PPI for the shortest duration.
Discuss using on an "as needed" basis for patients to manage their own symptoms
(warn patients of rebound acid secretion on reducing dose)
Long term PPI use may case increased risk of osteoporosis, hypomagnesaemia and possibly C. Difficile

Symptom persist
Consider secondary care referral

Symptom Free
Reiterate lifestyle advice and offer antacids / alginate (Pentac®) on a PRN basis for occasional symptoms

Causes of Dyspepsia
Organic-Peptic ulcer disease / Upper GI malignancy/ GORD/ Hiatus hernia/ medications/ Coeliac disease/ Crohn's disease/ gastroparesis/ **Functional** – postprandial distress syndrome/ epigastric pain syndrome

Abnormal Liver Chemistries



Compare with preDrug-Induced Liver Injury

Acute hepatitis	Isoniazid, pyrazinamide, rifampicin, ibuprofen, nimesulide, cotrimoxazole, phenytoin, dapsone
Cholestatic	Chlorpromazine, amoxicillin-clavulanic acid, flucloxacillin, carbamazepine, phenytoin
Autoimmune	Minocycline, nitrofurantoin, alpha methyl dopa
Steatohepatitis	Tamoxifen, amiodarone, tetracycline, valproic acid
Granulomatous hepatitis	Dapsone, sulphonamides
Cirrhosis	Methotrexate, amiodarone
Bland cholestasis	Anabolic steroids, danazol
Nodular regenerative hyperplasia	Didanosine, stavudine
Vanishing bile duct syndrome	Carbamazepine, cotrimoxazole
Peliosis hepatis	Anabolic steroids, azathioprine

Common Patterns of Livery Injury

- ↑ AST/ALT = hepatocellular damage
- ↑ GGT/ALP = cholestasis
- AST >> ALT = alcohol
- ALP >> GGT = bone disease, pregnancy
- GGT >> ALP = alcohol, medications

NILS Blood Tests

(On ICE look for the Abnormal LFTs panel)

- LFTs, U&Es, Clotting profile, CRP
- Iron profile
- Immunoglobulins
- Auto-antibody profile (ANA, ASM, AMA, ALKM)
- Hepatitis B & C
- Hepatitis A and E if AL T > 1000

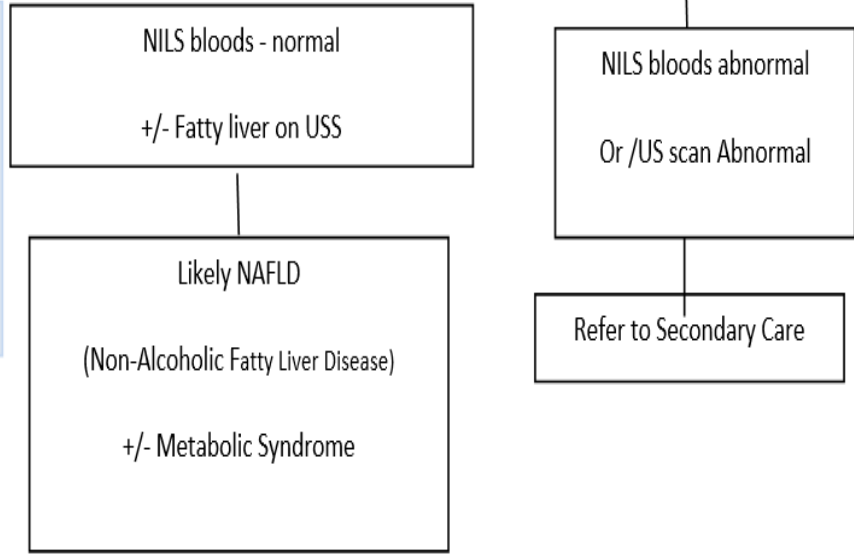
Common Patterns of Livery Injury

- ↑ AST/ALT = hepatocellular damage
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- AST >> ALT = alcohol
- ALP >> GGT = bone disease, pregnancy
- GGT >> ALP = alcohol, medications

Hepatic Synthetic Dysfunction

- ↑ Prothrombin Time (PT)
- ↓ Albumin
- ↑ Bilirubin
- ↓ Platelets

NILS (Non-Invasive Liver Screen) including Abdominal Ultrasound scan



- ### NILS Blood Tests
- (On ICE look for the Abnormal LFTs panel)
- LFTs, U&Es, Clotting profile, CRP
 - Iron profile
 - Immunoglobulins
 - Auto-antibody profile (ANA, ASM, AMA, ALKM)
 - Hepatitis B & C
 - Hepatitis A and E if ALT > 1000
 - tTg (Coeliac screen)
 - Alpha-1-Antitrypsin (A1AT)
 - Caeruloplasmin (if < 40 years of age)
 - Alpha fetoprotein
 - Fasting lipid profile

- ### Urgent Referral: ALT > 1000
- Viral hepatitis
 - Ischaemic hepatitis
 - Drug-induced liver injury (Paracetamol)
 - (Autoimmune hepatitis)

Calculate FIB4 Score

(a predictor of liver fibrosis)
on BEST website or MD Calc

Required parameters:

Age, AST, ALT, Platelet count

FIB4 score < 1.30*

FIB4 score > 1.30*

Fatty Liver

Possibly NASH
(non alcoholic steatohepatitis)
or established cirrhosis

Manage Metabolic Syndrome
Exercise

Weight loss >10%

Treat hypercholesterolaemia
or hypertriglyceridaemia

Reduce alcohol intake

Refer to Secondary Care

Reassess LFT/FIB4 in 6 months

How to calculate FIB 4

- Mr.BM
- 57 yr old
- elevated GGT , US fatty liver
- Bil 16 (<21)
- ALT 34 (<40)
- AST 27 (<40)
- GGT 97 (<50)
- ALP 101 (30-130)
- Hb 155
- Plat 210



Contact numbers

Diagnostic tools

Prescribing guidelines

Patient information sheets

Investigation/referrals

Useful websites

Home

BEST talks

Education and events

Relaxation

Medicines

Home

Clinical support by body system

Find a resource



Brain and mental health



Ophthalmology and ENT



Respiratory and Smoking



Cardiovascular and Lipids



Endocrine and Diabetes



Gastroenterology



Renal, Urology and Mens Health



Women's and Sexual Health



Top diagnostic tools

[6CIT- dementia screening tool](#)

[ABCD2 Score -TIA / Barnsley TIA Clinic Referral Form](#)

[Acute Kidney Injury AKI](#)

[Alcohol Units](#)

[Asthma Peak Flow Monitor chart](#)

[Blood transfusion thresholds](#)

[Bristol Stool score](#)

[CENTOR Score/Fever SCORE](#)

[CHA2DS2 VASC /HAS BLED](#)

[CKD Algorithm](#)

[Dermatology Quality of Life Index DQLI](#)

[Epworth sleepiness score](#)

[Familial Hypercholesterolaemia- Simon Broome Criteria/ referral criteria](#)

[FIB- 4](#)

[FRAX Score](#)

[Heart Failure pathway](#)

[Height -Weight conversion Adults / children weight/height](#)

[Hypertension diagnosis and treatment / Home blood pressure](#)

[IPSS / fluid input/output chart /LUTS pathway](#)

[Iron deficiency Anaemia](#)

[Menstrual Diary/PMS symptoms/premenstrual syndrome](#)

[MRC Dyspnoea Scale Questions](#)

[NEWS -National Early warning Score](#)

[Pain Rating Scale](#)

[PHQ-9 Questions](#)

[Pneumonia -CURB Score](#)

[Paeds: Traffic Light System/ vital signs normal range](#)

[QRISK](#)

[URTI- evidence based on RTI](#)

[SKIN lesion recognition table 1/ table 2 / lesion terminology](#)

[Spirometry interpretation](#)

[Suspected Cancer-referral criteria](#)

[QCancer - clinical risk assessment](#)

[Adult and Young Person's screening - guide for Barnsley](#)



Search "QT interval" or "QT" or "EKG"

Fibrosis-4 (FIB-4) Index for Liver Fibrosis



Noninvasive estimate of liver scarring in HCV and HBV patients, to assess need for biopsy.

When to Use ▾

Pearls/Pitfalls ▾

Why Use ▾

Age

years

AST

Aspartate aminotransferase

Norm: 0 - 40

U/L

Platelet count

Norm: 150 - 350

 $\times 10^9/L$ ↔

ALT

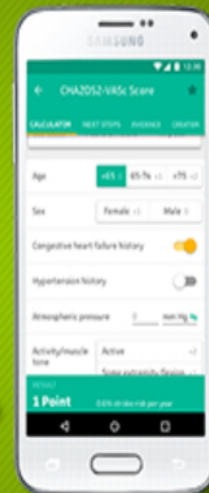
Alanine aminotransferase

Norm: 0 - 35

U/L

MDCalc
for Android
Coming
April 2017

Sign up for
early access



About the Creator



Dr. Richard Sterling

Related Calcs

Result:

Fibrosis-4 (FIB-4) Index for Liver Fibrosis



Noninvasive estimate of liver scarring in HCV and HBV patients, to assess need for biopsy.

When to Use ▾	Pearls/Pitfalls ▾	Why Use ▾
---------------	-------------------	-----------

Age	<input type="text" value="57"/>	years
AST Aspartate aminotransferase	<input type="text" value="27"/>	U/L
Platelet count	<input type="text" value="210"/>	$\times 10^9/L$ ↵
ALT Alanine aminotransferase	<input type="text" value="34"/>	U/L

MDCalc for Android
Coming April 2017
Sign up for early access

About the Creator



Dr. Richard Sterling

Related Calcs

- [Ca Correction for Albumin](#)
- [Child-Pugh Score](#)

1.26 points

Fibrosis Stage: 0-1

FIB-4 scores <1.45 are 81% sensitive (NPV 90%) to rule out advanced fibrosis.

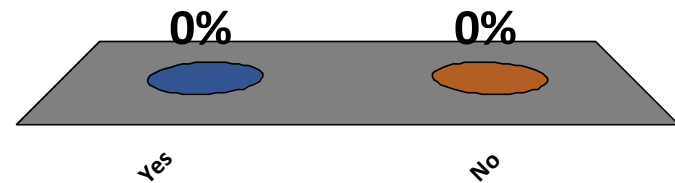
Next Steps >>>

Copy Results

Are you going to refer Mr. BM?

A. Yes

B. No



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Thankyou

