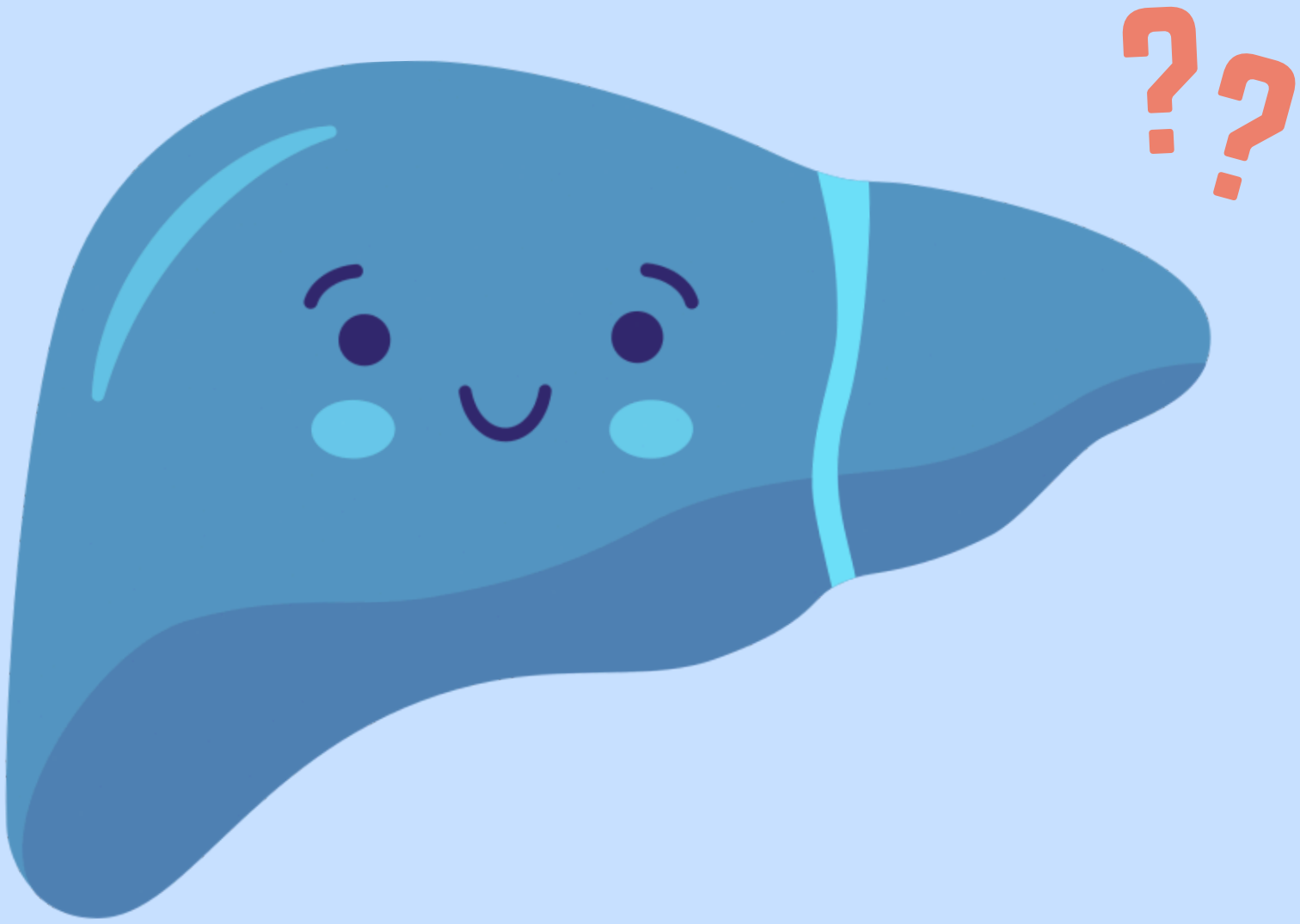

Liver Function Tests

MUMIMS

WHAT IS LFT?

A Liver Panel

Blood tests that measure different enzymes, proteins, and other substances made by the liver.

WHY DO A LFT?

Can help to differentiate between:

Hepatocellular Injury
(Hepatic jaundice)

VS

Cholestasis
(Post-hepatic or Jaundice)

Let's Start To Interpret LFTs!

NOTE

The values define the amount of liver damage, NOT the functionality of the liver!

Enzyme	Location of the Enzyme	If it's raised means?
ALT	Liver	Liver Damage
AST	Liver, Muscle (Mainly Skeletal & Cardiac)	Liver Damage / MI / Muscle Damage (Eg. Rhabdomyolysis)
ALP	Bile duct, Bone, Placenta	Cholestasis / High Bone Breakdown / Pregnancy
GGT	Bile Duct	Cholestasis / Recent Alcohol Use

LFTs Continued

These values determine the liver function.

PT	**Normal value → 9.5s to 13.8s If clotting time >13.8s → Lack of clotting factors produced by the liver**
Bilirubin	**Value increased = Liver unable to break down haemoglobin in RBC Other causes → Malaria, Haemolytic Anaemia**
Albumin	**Value decrease = Liver unable to produce protein Other causes → Diabetes, Nephrotic Syndrome**

Common Conditions to Note

↑ALT Predominant	• Acute or chronic viral hepatitis • Haemochromatosis • Alpha-1 antitrypsin deficiency
↑AST Predominant	• Alcohol-related • Steatohepatitis • Cirrhosis • Non-hepatic ○ Haemolysis, myopathy, thyroid disease, exercise
AST/ALT Ratio > 2	• Alcoholic hepatitis

Common Conditions (2)

↑↑↑ ALT
(>1000 U/L)

↑ALP ↑GGT

- Viral hepatitis
- Ischemic liver injury (prolonged hypotension or acute heart failure)
- Toxin- or drug-induced liver injury
- Bile duct obstruction
- Cystic fibrosis

Isolated ↑ALP

- Bony metastases or primary bone tumours (e.g. Sarcoma)
- Vitamin D deficiency
- Recent bone fractures
- Renal osteodystrophy

Isolated ↑GGT

- Recent alcohol use

[We Hope This Helps!]

- More to know via the fact sheet that will be launched soon!
- Bonuses and questions with answers will be provided in the fact sheet.
- All the best and enjoy your rotations!

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