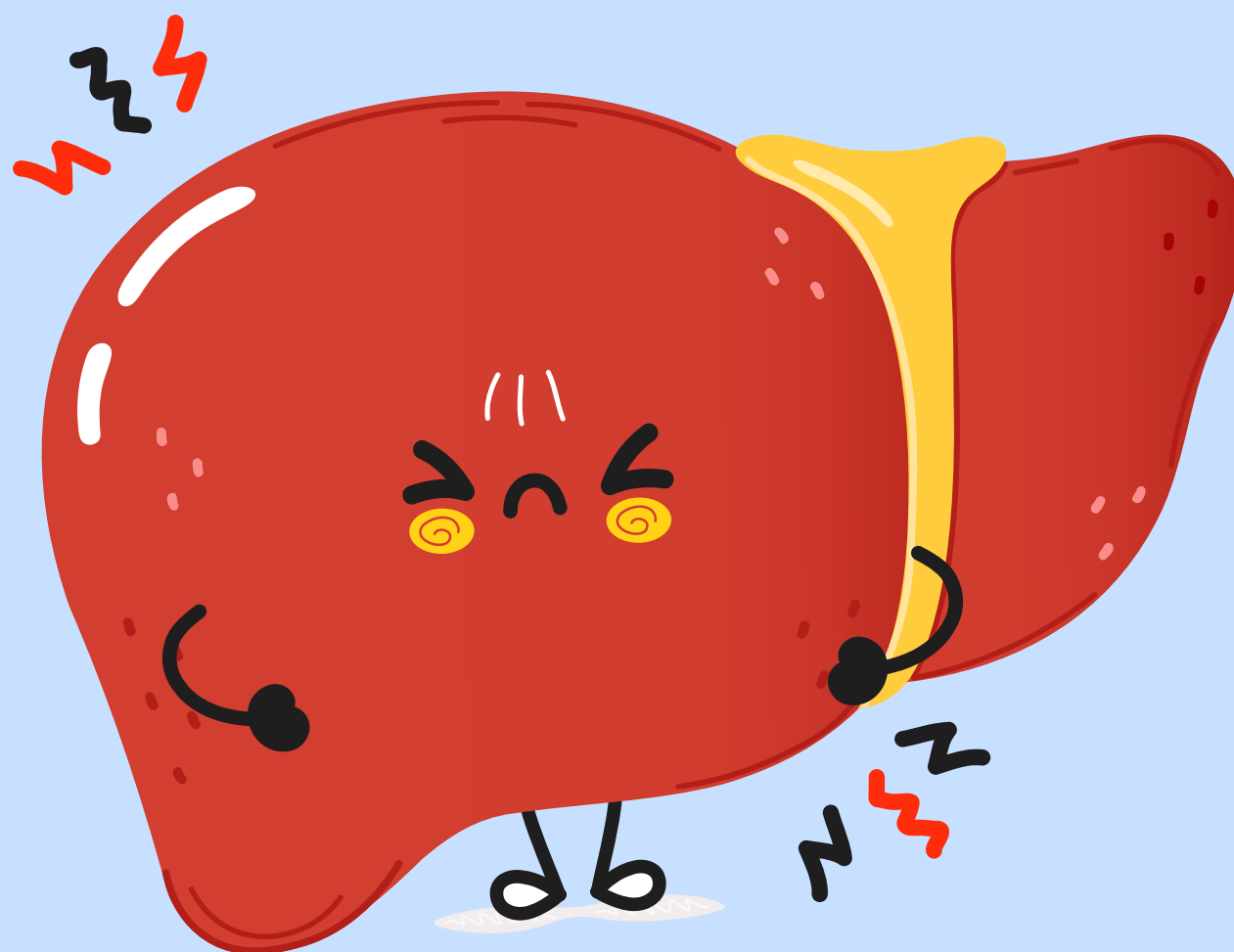
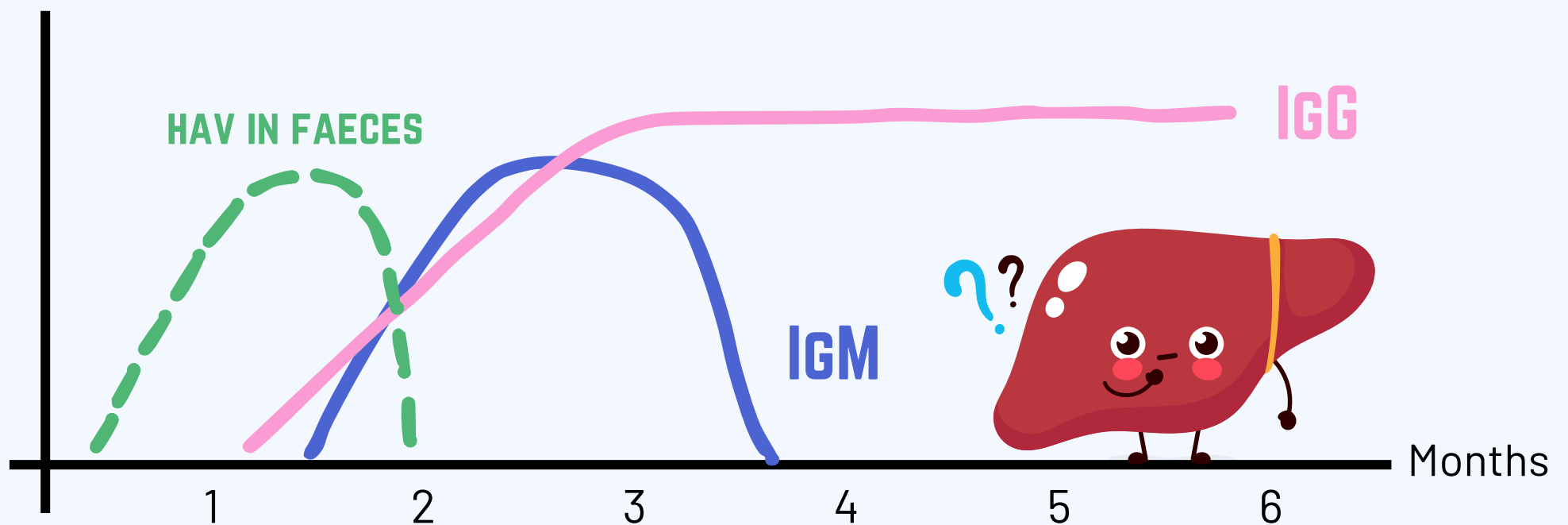




HEPATITIS SEROLOGY

MUMIM'S

HAV SEROLOGY



- Anti-HAV IgM: acute hepatitis A infection
- Anti-HAV IgG: immunity to hepatitis A from past infection or vaccination

TOTAL ANTI-HAV	ANTI-HAV IgM	INTERPRETATION
+	+	Current infection, recent infection, or recent vaccination
+	-	Previous infection or vaccination
-	-	Not infected ie. susceptible

HBV SEROLOGY

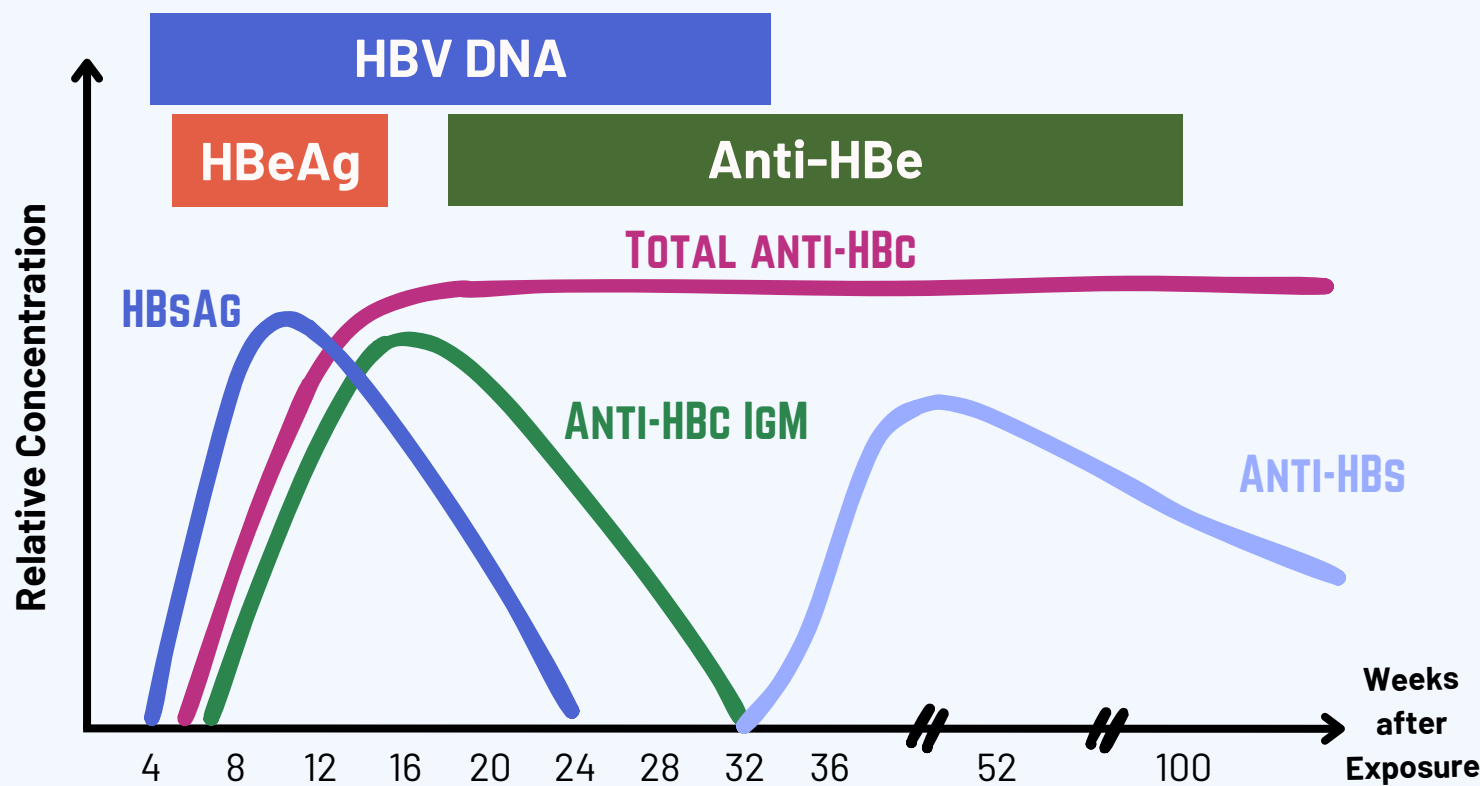
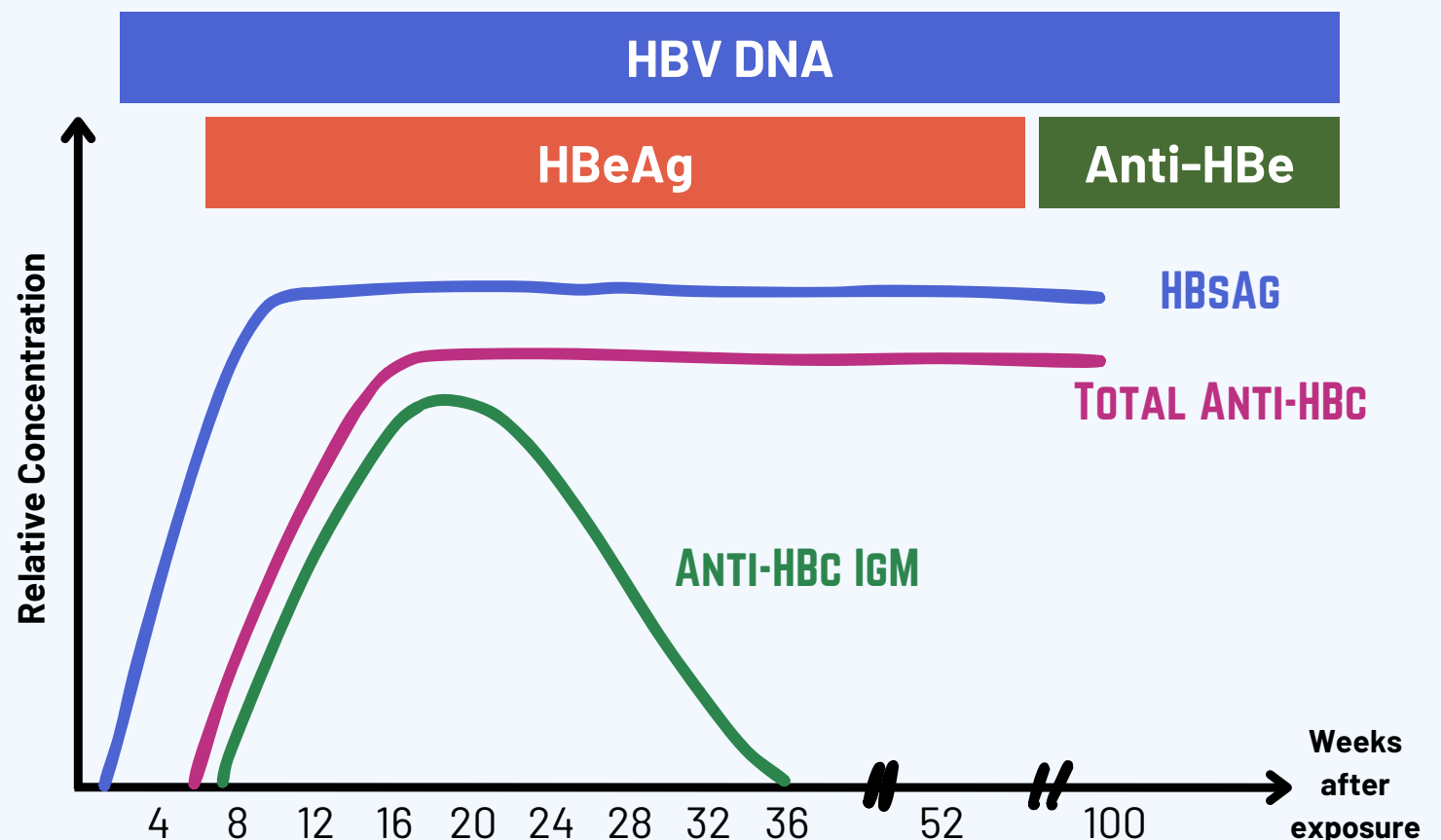


Table 1

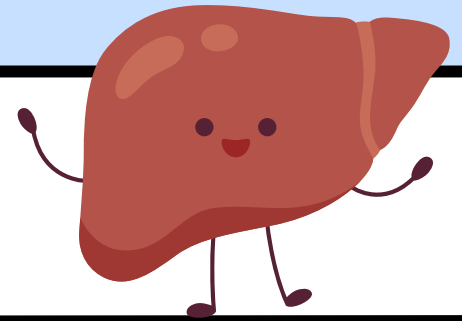
Typical serologic course of acute Hepatitis B to recovery

Table 2

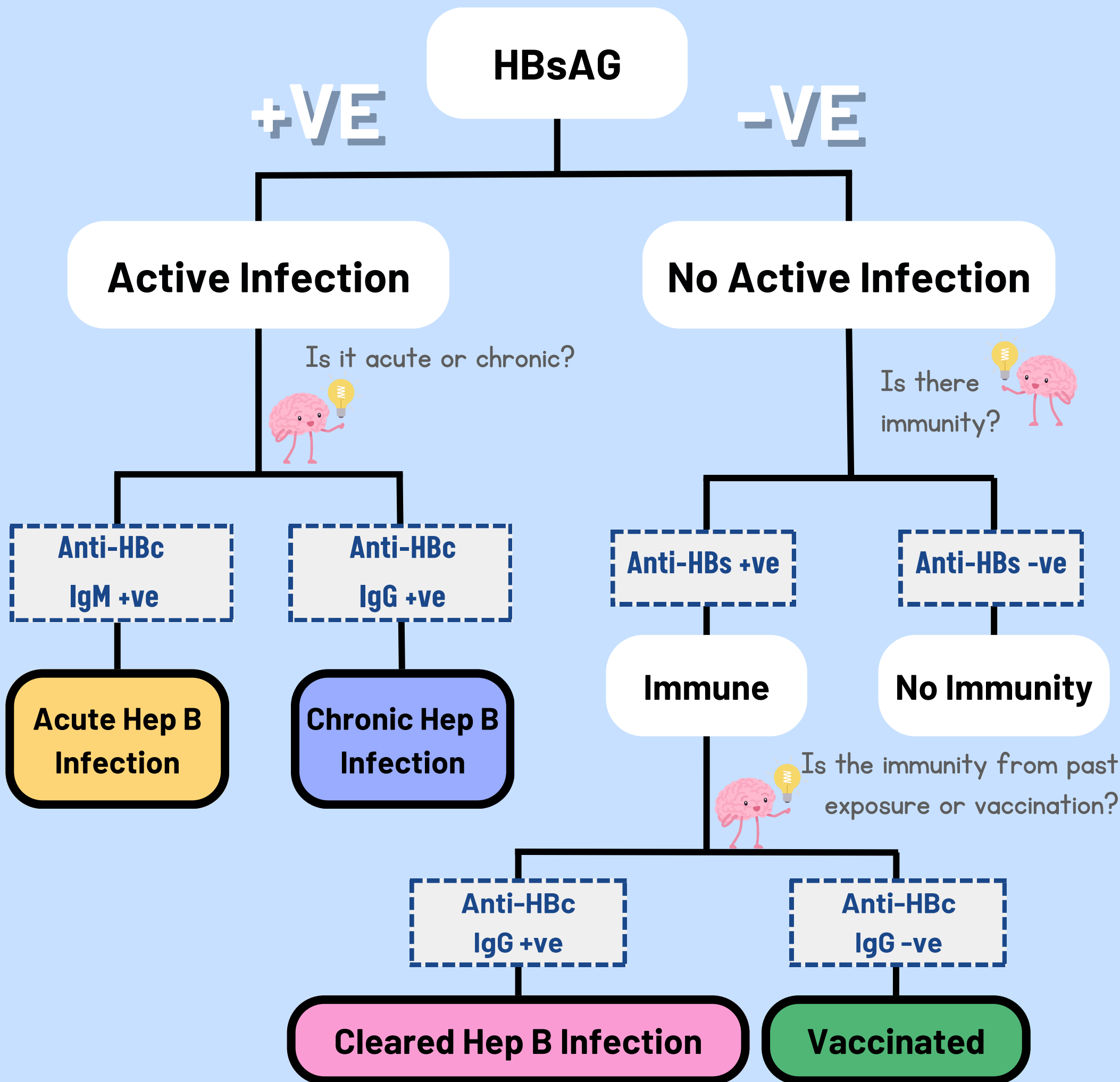
Typical serologic course of progression to chronic Hepatitis B

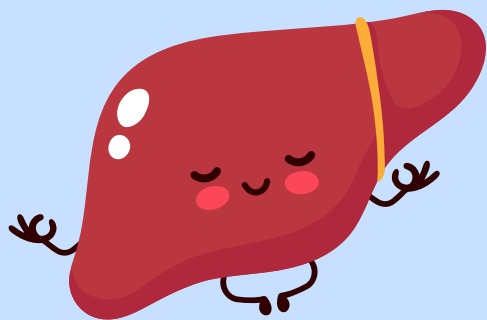


HBV SEROLOGY



HBsAG	• Acute HBV infection • Chronic HBV infection
Anti-HBs	• Immunity from past exposure • Immunity from vaccination
Anti-HBc IgM	• Acute HBV infection
Anti-HBc IgG	• Immunity from past exposure
Total Anti-HBc	• Natural infection (current / past exposure)
HBeAG	• Virus replicating → high infectivity
HBV DNA	• Acute HBV infection • Chronic HBV infection (if detectable for ≥ 6 months)

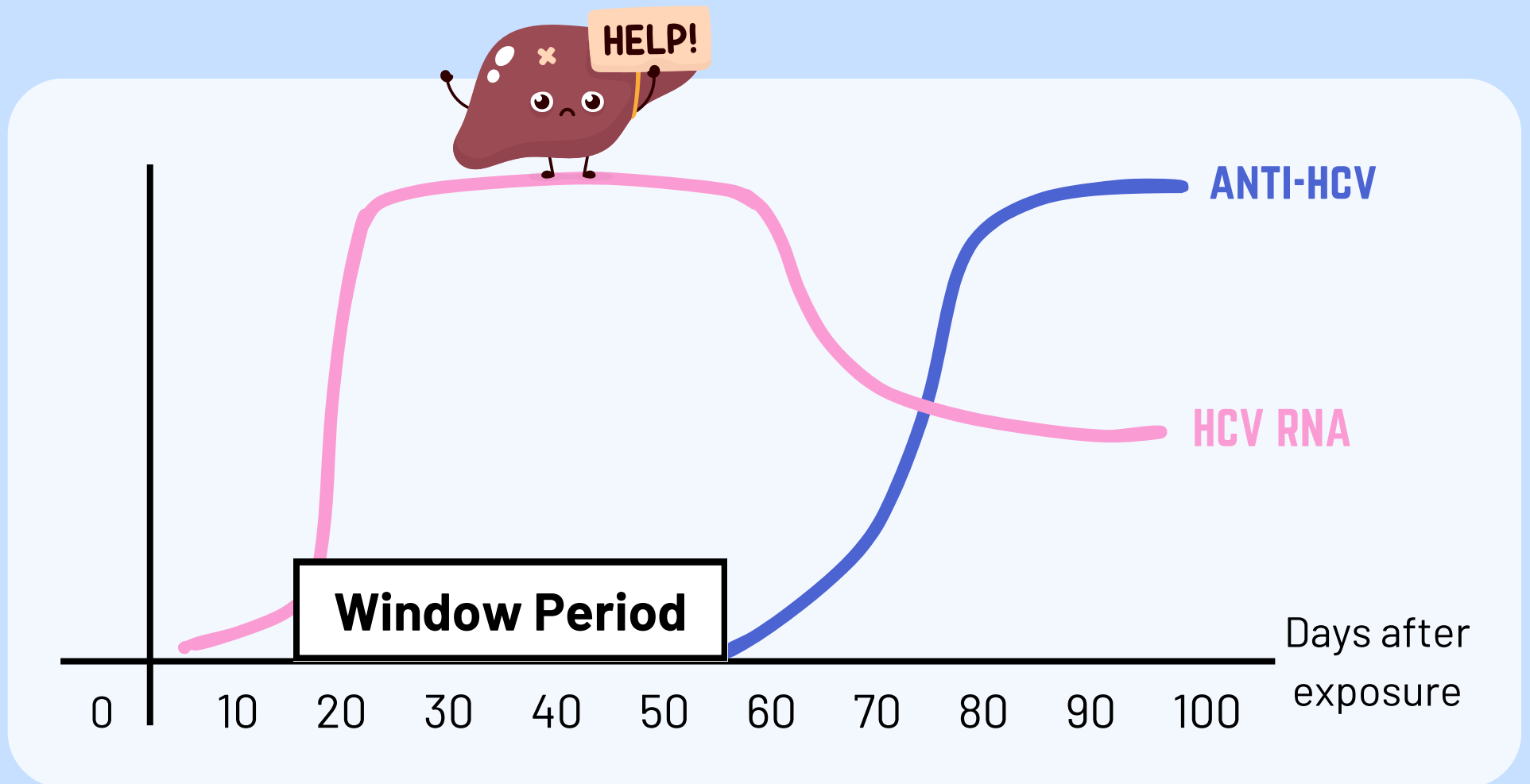




SUMMARY

	HBsAG	Anti-HBs	Total Anti-HBc	Anti-HBc IgM	HBV DNA
Acute HBV Infection	+	-	+(IgM)	+	+
Chronic HBV Infection	+	-	+(IgG)	-	+
Recovered from past infection & immune	-	+	+(IgG)	-	-
Immunity from vaccination	-	+	-	-	-

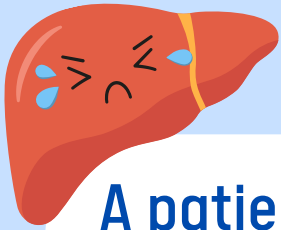
HCV SEROLOGY



Anti-HCV	HCV RNA	INTERPRETATION
+		Current HCV infection, or past HCV infection that has resolved Recommend testing for HCV RNA to identify current infection
+	+	Current HCV infection
+	-	Cleared HCV infection Natural clearance/successful treatment

LET'S TRY THIS QUESTION

COMMENT YOUR ANSWERS BELOW!



A patient has abnormal levels of liver enzymes and the following other laboratory findings when screened for Hepatitis B virus (HBV) infection :

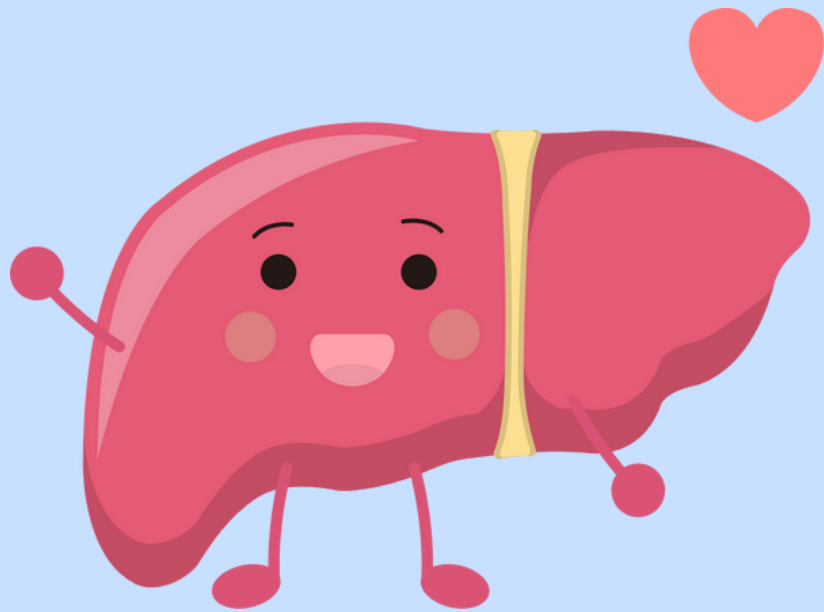
Hepatitis B surface antigen	Negative
Antibody to Hepatitis B surface antigen	Positive
IgG antibody to Hepatitis B core antigen	Positive
IgM antibody to Hepatitis B core antigen	Negative
Hepatitis B e antigen	Negative
HBV DNA	Undetected

Which of the following is the most likely diagnosis?

- A. Acute HBV infection
- B. Chronic HBV infection
- C. Immunity from previous HBV immunisation
- D. Immunity from previous HBV infection



[WE HOPE THIS HELPS!]



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@mumims_csjb



Monash University Malaysia
Internal Medicine Society - Mumims



monashintmedclub@gmail.co
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REFERENCES



1. MIMS medical microbiology

2. CDC

<https://www.cdc.gov/hepatitis/statistics/surveillanceguidance/HepatitisA.htm>

3. CDC

<https://www.cdc.gov/hepatitis/statistics/surveillanceguidance/HepatitisB.htm>

4. CDC

<https://www.cdc.gov/hepatitis/statistics/surveillanceguidance/HepatitisC.htm>

5. CDC

<https://www.cdc.gov/hepatitis/statistics/SurveillanceGuidance/Appendices.htm#Appendix-B>

6. Y2S1 viral hepatitis slides by Dr Amreeta