

THE ADVENTURES OF

CAPTAIN IMMUNITY



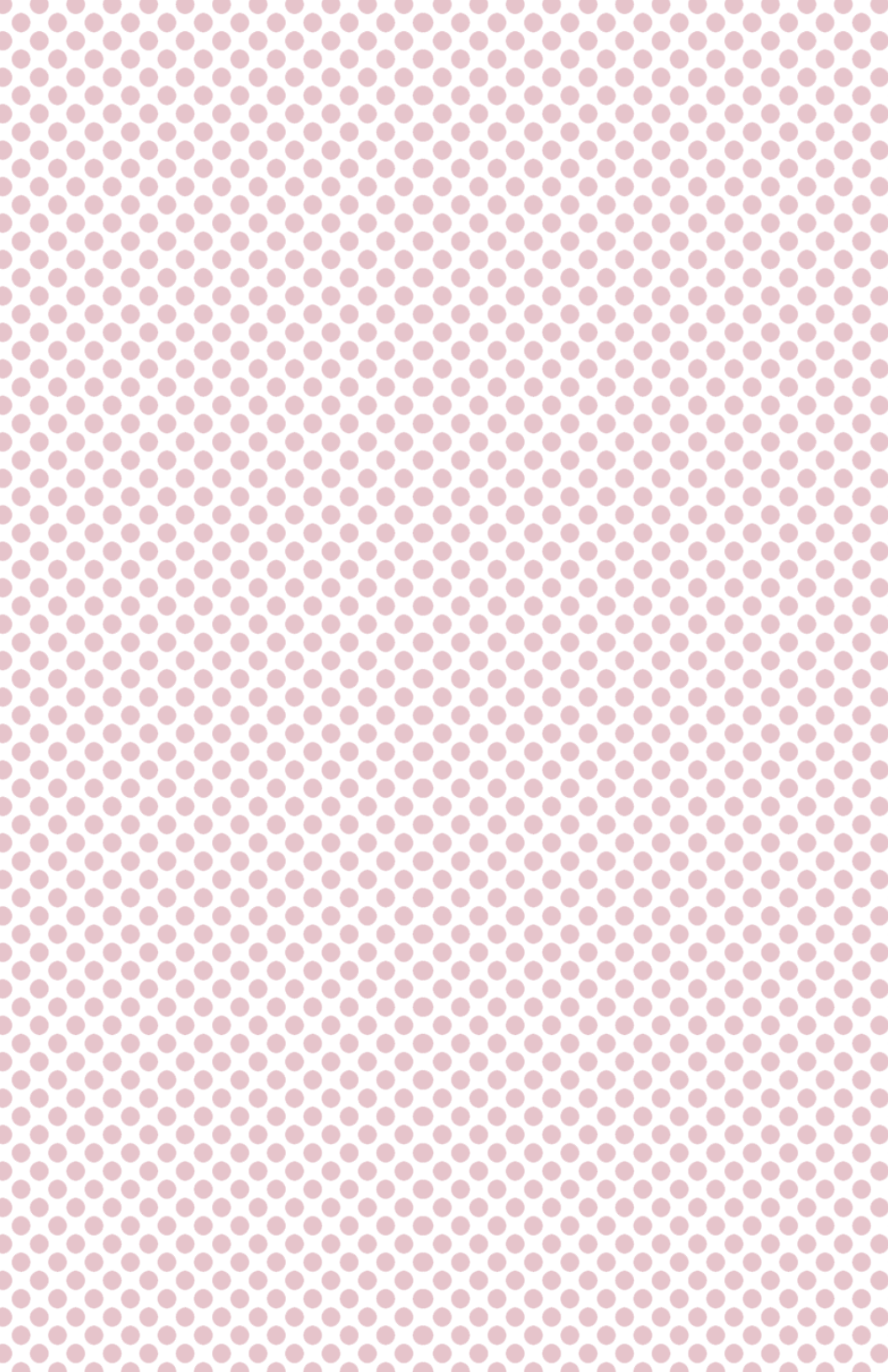
vs.

Titis

the Hepatitis B virus

BCH
COMICS

ISSUE **1**



MEET THE CHARACTERS



BILLY'S DOCTOR TAKES BILLY AND HIS MOTHER ON A JOURNEY TO BETTER UNDERSTAND CHRONIC HEPATITIS B...

MEET THE CHARACTERS



...AND THE CONTINUOUS BATTLE BETWEEN CAPTAIN IMMUNITY (THE IMMUNE SYSTEM) AND TITIS (THE HEPATITIS B VIRUS)!

INTRODUCTION

BILLY GOES TO HIS DOCTOR... NOW THAT YOU'RE OLDER, WE WANT TO TALK TO YOU MORE ABOUT YOUR CHRONIC HEPATITIS B...



...IT IS A VIRUS THAT WAS PASSED FROM YOUR MOTHER WHEN YOU WERE BORN...



...BUT YOU CAN ALSO GET IT FROM CONTACT WITH BLOOD AND OTHER BODILY FLUIDS...



...OR THROUGH SHARING THINGS LIKE RAZORS OR TOOTHBRUSHES, OR HAVING SEX.

INTRODUCTION

YOU'RE DOING ALL THE RIGHT THINGS BY HAVING ULTRASOUNDS TO LOOK FOR MASSES ON THE LIVER AND BY GETTING BLOOD WORK TO CHECK YOUR ALT LEVELS...

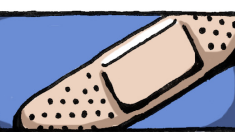


WITH HEPATITIS B, YOUR LIVER MAY NOT DO ITS JOBS AS WELL, LIKE...

CLEANING BLOOD



HELPING STOP BLEEDING

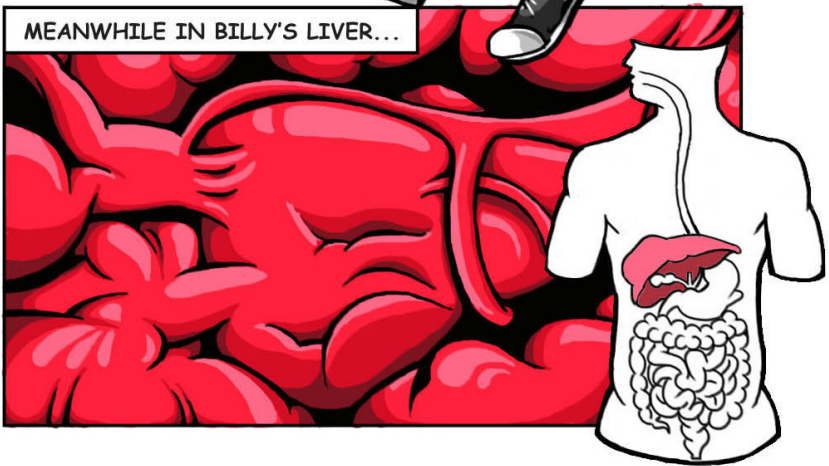
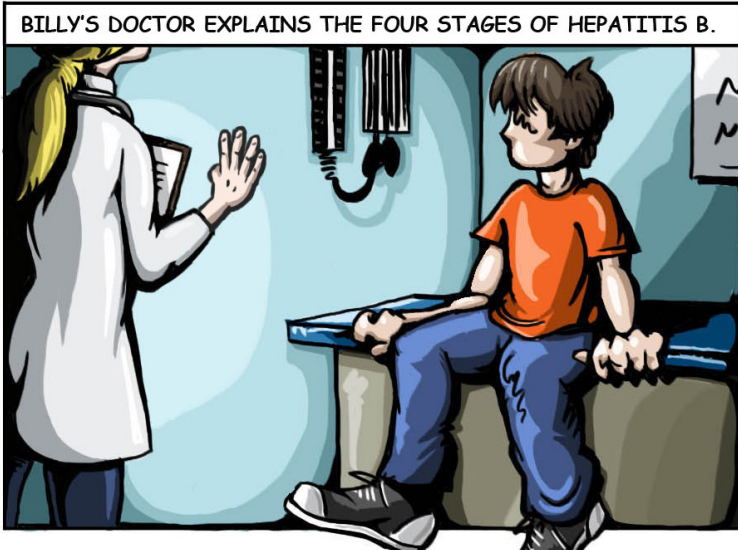


DIGESTING FAT



AND STORING ENERGY

CHRONIC HEPATITIS B



The four phases of chronic hepatitis B. When you have chronic hepatitis B, the infection is in one of four phases. Each of these phases can last months or even years.

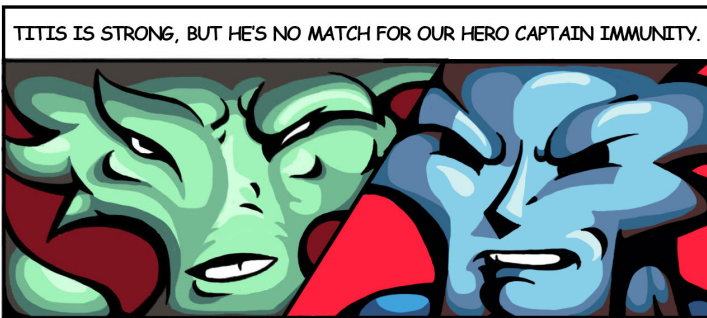
1. The Immune Tolerance Phase: Titis is doing no harm.
2. The Immune Clearance Phase: Titis starts to attack your liver.
3. The Latent Phase: Captain Immunity has Titis under control.
4. The Reactivation Phase: Titis goes back to doing harm.

IMMUNE TOLERANCE



Titis is doing no harm. Titis is just hanging out in the liver not causing any damage. Your immune system (which fights infection) is putting up with Titis being there. When your doctor does blood tests it will show low numbers. Titis is active but not causing damage to your liver.

IMMUNE CLEARANCE



Titis starts to attack your liver. Your immune system (Captain Immunity) responds to Titis and decides it wants to fight him off because it doesn't like him being there. Your doctor can tell this is happening because your blood results will be high. You may need a liver biopsy to determine whether you need medication to help.

LATENT

ALSO KNOWN AS SEROCONVERSION



Captain Immunity has Titis under control, but he's always around. After Captain Immunity wins the battle, your body has Titis under control and any damage that was being done to the liver has stopped. Your blood levels will return to normal.

REACTIVATION



Titis goes back to doing harm. There's always the chance that Titis will get smart and figure out a way to get through your immune system again. If this happens, it will most likely be when you are grown-up and being followed by an adult liver doctor. You may even need to take medicine.

THE END



BILLY GOES AND HANGS OUT WITH HIS FRIENDS AFTER HIS APPOINTMENT, BUT HE WILL HAVE TO RETURN FOR REGULAR CHECK-UPS.

Even if Titis doesn't come back, you'll always need to see a doctor for blood work and ultrasounds to be sure your liver is healthy.

GLOSSARY

Acute: This is how hepatitis B starts. It is the kind of virus you are first infected with, and lasts only several weeks to six months. Many people don't even have any symptoms. Most of the time though, it leads to a chronic infection (see below).

Chronic: This means that the hepatitis B virus is still in your body after six months. This kind of virus is more serious than the acute kind. With chronic hepatitis B, you have an increased risk for serious liver diseases when you become an adult. Luckily, there are treatments that can lessen the harm caused by the virus. It's important to see your doctor regularly.

Clearance: Your body is trying to clear itself of the hepatitis virus. During this phase, your ALT rises and you'll need your blood checked more often. This phase can last for a few months or years. If your ALT stays high, your doctor may talk with you about treatment options. Even though the virus is "inactive" it is important to be monitored regularly because there is a chance it can become active.

Hepatitis B: A contagious disease caused by a virus that infects the liver. It causes inflammation (irritation) and swelling. This harms your liver because it cannot do its job (like dealing with harmful substances). In its mildest form, it lasts just a few weeks and "clears" on its own. In its most serious form, the infection needs lifelong care and can lead to serious liver diseases. It is not curable but it is treatable.

Hepatitis B Vaccinations: These shots are given in a series of three, usually starting when someone is a baby. They help keep that person from getting hepatitis B.

Latent/Seroconversion: Your body has controlled the virus, and right now the virus is harmless. Your ALT will return to normal. This phase can last for many years.

Liver: An important organ that breaks down harmful substances and medicines, makes bile to help you digest food, stores energy, fights infection and makes important proteins and helps your blood clot.

Reactivated: The virus becomes active again, hurting your liver. ALT is no longer at normal levels. Your doctor may talk to you about treatment during this phase.

STD: This stands for sexually transmitted disease, which is an infectious disease that spreads from person to person through intimate contact. STDs can affect guys and girls of all ages and backgrounds who are having sex.

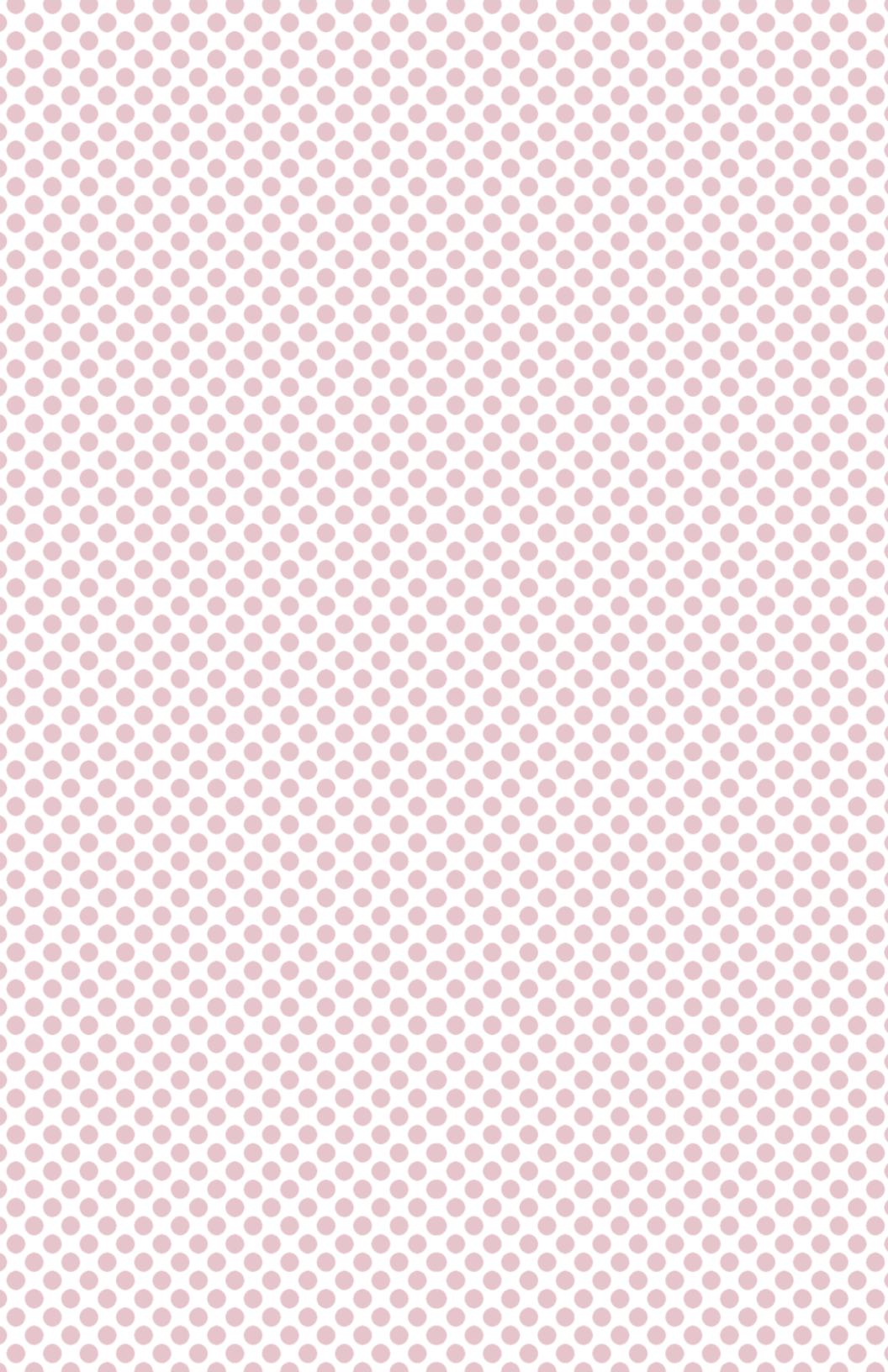
Tolerance: Your liver is not being injured. This phase can last for several months or even several years.

Ultrasound: A test using sound waves to show if your liver is healthy. The technician puts a cold jelly on your stomach and uses a probe to take a picture of your liver. This test uses no radiation and does not hurt.

WORD SEARCH

Chronic Tolerance ALT Clearance
Latent Reactivated Liver Hepatitis B Vaccination

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**[www.childrenshospital.org/centers-and-services/
center-for-childhood-liver-disease-program](http://www.childrenshospital.org/centers-and-services/center-for-childhood-liver-disease-program)**

For more information about Hepatitis B, please visit:

The American Liver Foundation
(617) 527-5600

<http://www.liverfoundation.org/>

Centers for Disease Control and Prevention
(800) 232-4636

<http://www.cdc.gov/hepatitis/hbv>

Hepatitis B Foundation
(215) 489-4900

<http://hepb.org>

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