

INTRODUCTION

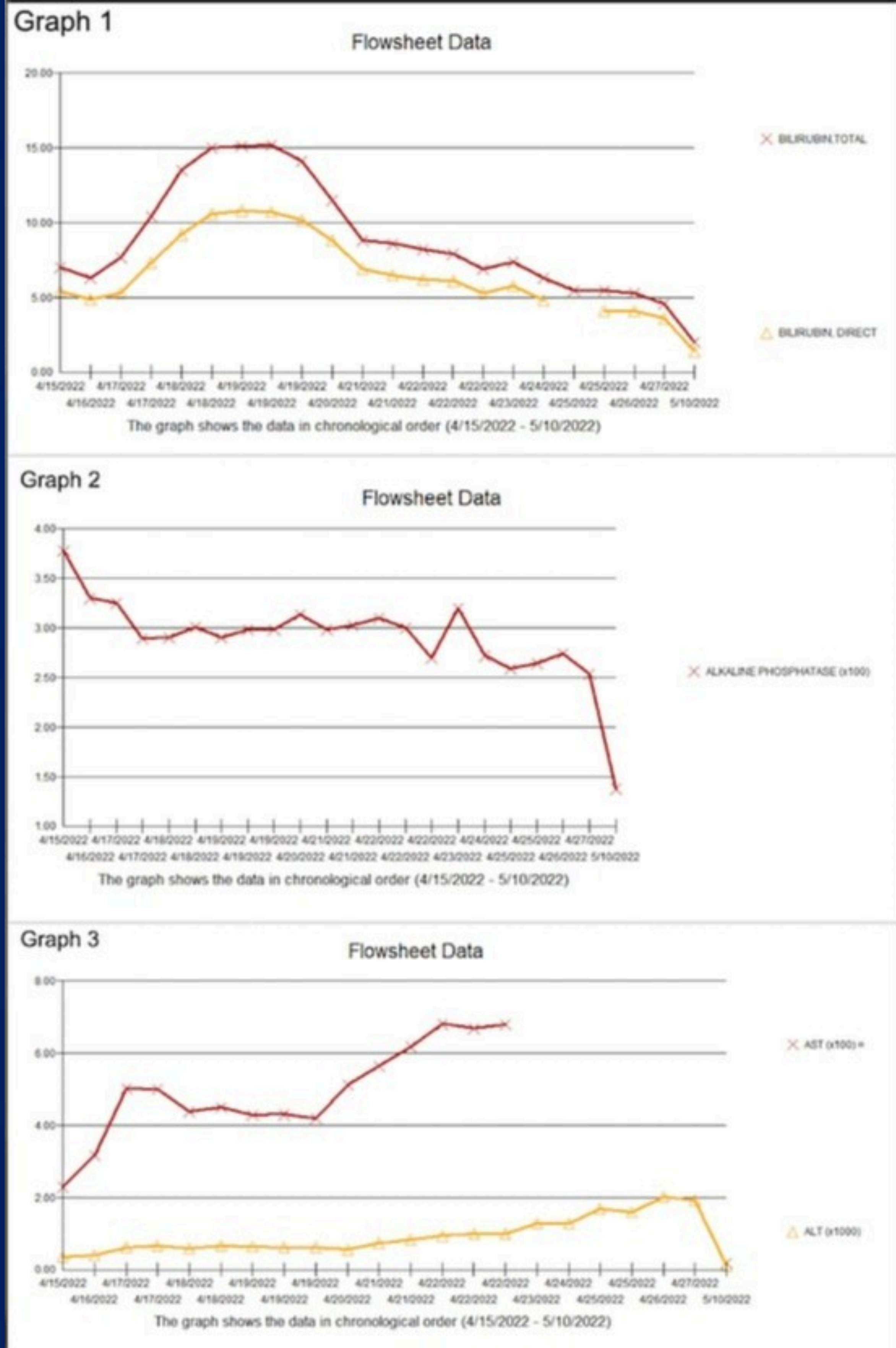
- Hepatitis E virus (HEV) is a non-enveloped, single stranded, ribonucleic acid (RNA) virus that belongs to Herpeviridae family.
- It is a common cause of acute hepatitis and transmission can occur through blood transfusions, contaminated water or food, and mother to child transmission. Symptoms can present as fever, anorexia, abdominal pain, nausea, vomiting, diarrhea and jaundice. Labs usually reveal elevated bilirubin, aspartate aminotransferase (AST) and alanine aminotransferase (ALT).
- Here we present a patient with acute hepatitis initially found to have mixed pattern of liver enzymes which eventually progressed to hepatocellular pattern, and confirmed to have acute cholestatic hepatitis compatible with clinical history of HEV on liver biopsy.

CASE DESCRIPTION

- A 40-year-old healthy male presented with a two week history of pruritus, dark urine, and light stools. Patient reported eating undercooked eggs and started experiencing right upper quadrant (RUQ) discomfort which progressed to flu-like illness. He tried over the counter treatment with no improvement.
- Labs initially showed a mixed pattern of liver enzymes which progressed to the hepatocellular pattern. Comprehensive acute and chronic liver disease workup was done (shown in table 1) and it was remarkable for elevated immunoglobulin G titers and positive Hepatitis E immunoglobulin G.

A Rare Case Of Acute Cholestatic Hepatitis Due To Acute Hepatitis E Infection

Jasparit Minhas, MD; Vikash Kumar, MD; Srilaxmi Gujjula, MD; Praneeth Bandaru, MD; Vijay Gayam, MD; Suut Gokturk, MD; Jamil Shah, MD; Denzil Etienne, MD; Madhavi Reddy, MD



Acute Infectious and Drugs Test Results:	
Hepatitis A IgG	Reactive
Hepatitis A IgM	Negative
Hepatitis B surface antigen	Not reactive
Hepatitis B core antibody	Not reactive
Hepatitis B core antigen	Not reactive
Hepatitis B viral load	Negative
Hepatitis C antibody	Reactive
Hepatitis C viral load	Negative
Hepatitis E Immunoglobulin G	Detected
Human Immunodeficiency Virus antigen/antibody	Negative
Epstein-Barr Virus PCR	Negative
Cytomegalovirus Immunoglobulin G	1.90
Cytomegalovirus Immunoglobulin M	Negative
Herpes Simplex Virus 1 Antibody Immunoglobulin G	Not elevated
Herpes Simplex Virus 1 and 2 PCR	Negative
Gonorrhea	Negative
Chlamydia	Negative
Urine toxicology (10 drug panel)	Negative
Serum acetaminophen levels	< 1.0
Serum salicylate levels	< 5.0
Autoimmune and Metabolic Test Results:	
Antinuclear antibody	Negative
Anti-smooth muscle antibody	Negative
Antimitochondrial antibody	Negative
Tissue transglutaminase antibody	Negative
Immunoglobulin A titers	Within normal limits
Ceruloplasmin	Within normal limits
Soluble liver antigen antibody	Negative
Anti-liver-kidney microsomal type 1 antibody	Negative
Immunoglobulin G titers	2196 (elevated)
Alpha 1 antitrypsin	Within normal limits
Hemochromatosis gene (HFE) panel	Negative

Table 1: Acute Infectious and Drugs Test Results, Autoimmune and Metabolic Test Results

- RUQ ultrasound did not reveal any evidence of biliary obstruction. Magnetic resonance cholangiopancreatography/Magnetic resonance imaging (MRCP/MRI) abdomen was negative for hepatobiliary disease or acute cholangitis.
- Liver biopsy results confirmed acute cholestatic hepatitis related to HEV infection and ruled out autoimmune hepatitis.
- Patient adhered to lifestyle modifications resulting in symptomatic improvement. The patient was educated on hygienic precautions and avoidance of hepatotoxic medications and drugs as well as uncooked meals.

DISCUSSION

- HEV is a concern to public health and is the cause of acute viral hepatitis worldwide with a high risk of progressing to chronic infection in immunocompromised patients. HEV usually spontaneously resolves in the young and immunocompetent population, however some patients may develop acute hepatic failure, cholestatic hepatitis, or chronic HEV. Acute HEV is managed with supportive care whereas chronic HEV involves antiviral therapy and reduction in immunosuppressive therapy (in immunocompromised patients).