

# A Case of Acute Hepatitis E Infection Associated with Deer Meat in the U.S.A.

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## INTRODUCTION

- The seroprevalence rate of hepatitis E virus (HEV) in the United States is 6%
- Most cases of HEV infection have been reported from travelers from endemic countries.
- The usual mode of transmission is fecal oral
- There has been no reported case of direct transmission from wild game to humans in the United States.



(a) White-tailed deer



(b) Mule deer

## CASE PRESENTATION

### History

- A 53-year-old female with hyperlipidemia
- One week prior to presentation with worsening epigastric pain, nausea and vomiting, fatigue, and intermittent fevers patient was butchering deer.
- She smoked 10 cigarettes/day regularly, and drank 1-2 drinks once or twice per month.
- She had no known allergies.

### Physical Examination

- Mild scleral icterus
- Mild epigastric tenderness
- No hepatomegaly, spider nevi, telangiectasia, or caput medusa
- No pedal edema

### Labs

Laboratory Test	Results	Reference Range
Alkaline Phosphatase, IU/L	262	45-115
Alanine Transaminase, IU/L	2365	7-35
Aspartate Transaminase, IU/L	1107	14-41
Total Bilirubin, mg/dL	2.6	0.4-1.4
Albumin, mg/dL	2.9	3.3-5.0
Hepatitis E Ab IgM	Detected	Not Detected
Hepatitis E Ab IgG	Detected	Not Detected

Patient immune to HAV and non-immune to HBV and HCV. Autoimmune serologies negative.

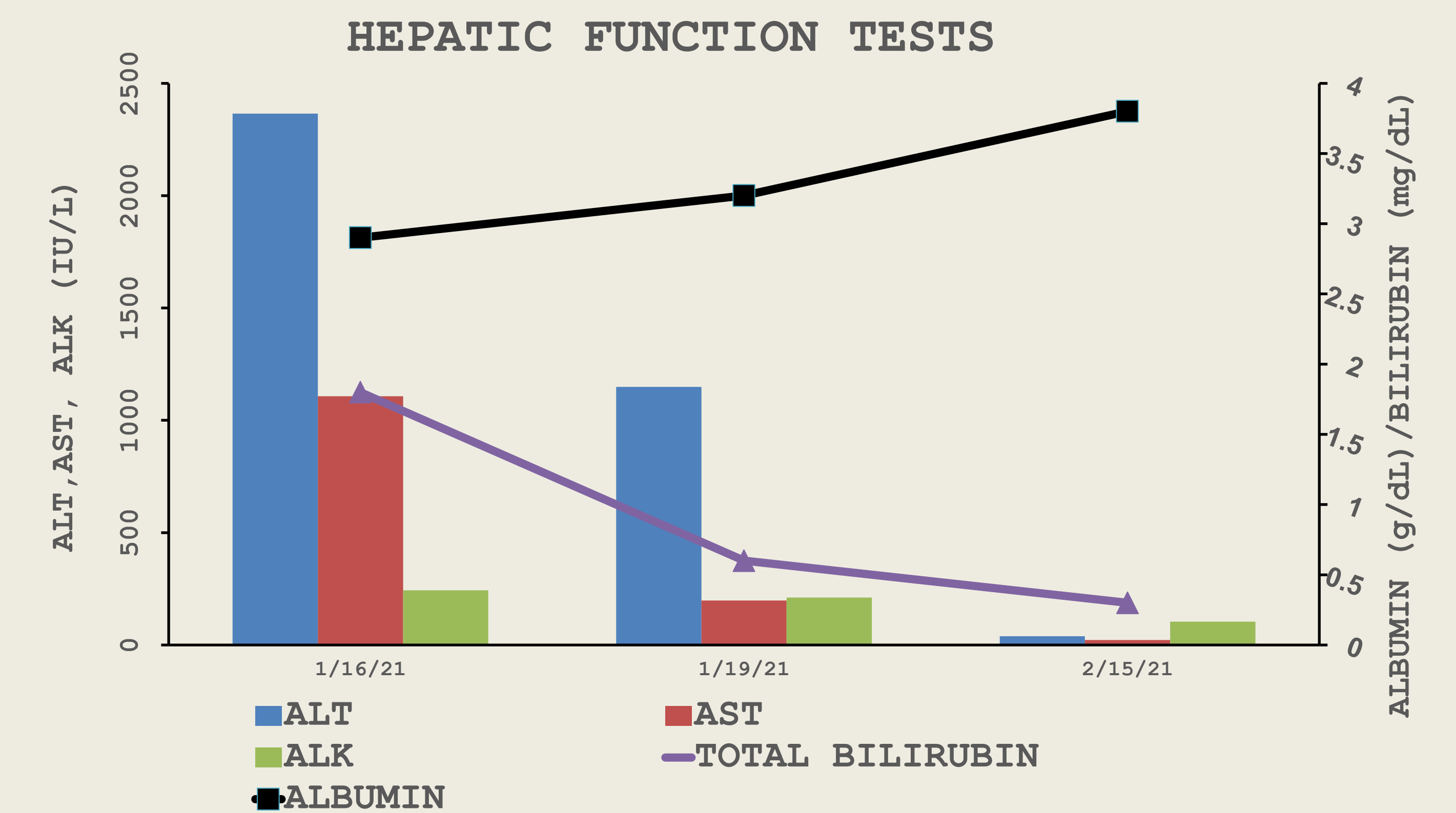
### Abdominal Ultrasound

- Liver was homogenous in echotexture with no steatosis or suspicious mass
- Gallbladder was normal with no wall thickening, or pericholecystic fluid collection
- No intrahepatic or extrahepatic biliary ductal dilatation

## CLINICAL COURSE

### Supportive Therapy

- Intravenous fluids
- Analgesic therapy
- No antiviral medication given



## CONCLUSIONS

This case confirms deer as a vector for the transmission of HEV to humans in the U.S. HEV transmission from deer meat to humans has been reported in Japan with the consumption of raw venison. We note the proximity of Wisconsin to Canada. While the seroprevalence of HEV among deer in Canada has been estimated to range from 3.2-8.8%, the HEV RNA itself has not been detected in the animals.

## REFERENCES

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