



A CASE IVERMECTIN INDUCED ACUTE LIVER FAILURE

Suhail Sidhu, Ivanna Tang, Shalini Jain, MD, Thamer Kassim, MD, and Rajani Rangray, MBBS
Creighton University School of Medicine, CHI Health Creighton University Medical Center – Bergan Mercy



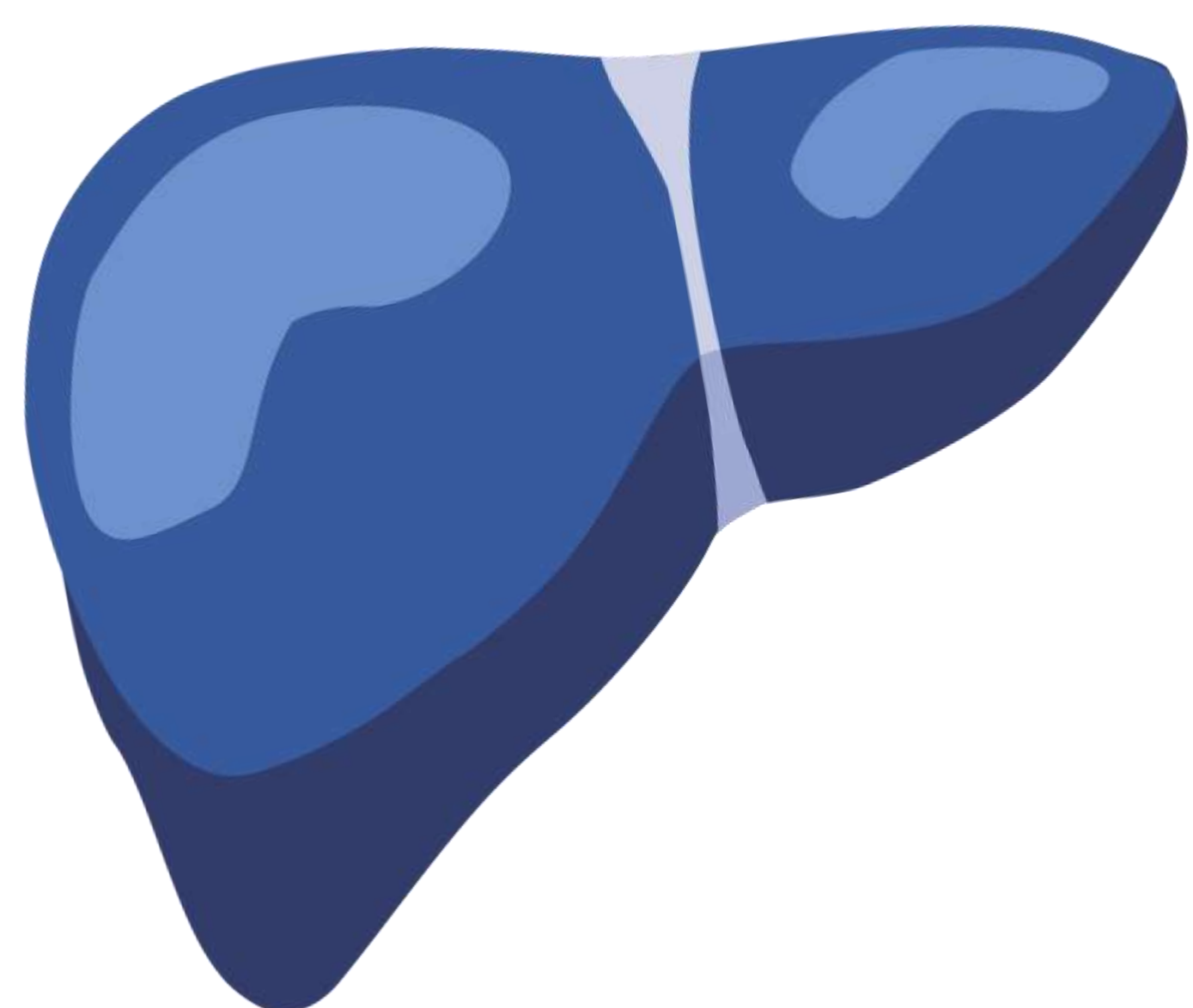
Background

Ivermectin is an antiparasitic medication that is primarily metabolized by the liver.¹

Current research has failed to demonstrate clinical benefit for treatment of COVID-19.²

However, misinformation campaigns have misled patients to ingest Ivermectin at concentrations meant for domestic animals.

We present a case of acute liver failure secondary to the use of Ivermectin.



Results



61 y.o. man

PMH:
Ischemic Cardiomyopathy
Ejection Fraction 21%
Treated Hepatitis C

Day -14

- Injects self with 2 doses of weight-based horse Ivermectin for COVID prophylaxis
- Begins having generalized weakness and jaundice

Presentation to ER

- Presents to ER
- Denies significant ETOH, acetaminophen, or illicit drug use
- Physical exam: scleral icterus, hepatomegaly with no abdominal tenderness
- Negative acute hepatitis panel, HSV, CMV
- Positive hepatitis C antibodies, but patient is in sustained virologic response
- Full workup for chronic liver disease unremarkable
- US: hepatosplenomegaly with patent portal and hepatic vasculature

ICU

- Develops hepatic encephalopathy along with his coagulopathy, raising concern for acute hepatic failure
- Started on N-Acetylcystine, Rifaximin, supportive care

Discharge

- Recovers well and does not require liver transplant

	ALP (u/l)	AST (u/l)	ALT (u/l)	T. Bili (u/l)	INR
Day 0	252 (H)	997 (H)	1036 (H)	6.7 (H)	>12.6 (AA)
Day 1	199 (H)	1375 (H)	1146 (H)	6.6 (H)	>12.6 (AA)
Day 3	165 (H)	973(H)	979(H)	5.3(H)	4.7(H)
Day 5	186 (H)	654 (H)	865 (H)	6.7 (H)	2.9 (H)
Day 7	208 (H)	283 (H)	595 (H)	5.8 (H)	2.1 (H)
Day 12	179 (H)	49 (H)	206 (H)	3.0 (H)	1.3
Day 22	145 (H)	24	47	1.9 (H)	1.4



Discussion

FDA recommends against the use of Ivermectin to treat COVID-19. Many continue to inappropriately consume Ivermectin.

Ivermectin-induced liver failure is a rare but deadly side effect.

Given our patient's rapid onset of symptoms post-self-injection of Ivermectin, his liver injury was presumed to be related to Ivermectin.

The drug interaction between Ivermectin and warfarin had worsened the patient's coagulopathy.

Physicians should be aware of the ways Ivermectin overdose may clinically present to avoid delayed treatment.

This case demonstrates the detriments of perpetuation of medical misinformation to care.

References

[1] Ivermectin. National Institutes of Health. <https://www.covid19treatmentguidelines.nih.gov/therapies/antiviral-therapy/ivermectin/>. Accessed June 5, 2022.
 [2] Why you should not use ivermectin to treat or prevent COVID-19. U.S. Food and Drug Administration.