

UC San Diego

Family Medicine Research Symposium 2026

Title

Homemade-Kombucha-Fueled Liver Failure

Permalink

<https://escholarship.org/uc/item/9fz2x1bp>

Authors

Mignucci, Alexandra

Reddy, Divya

Publication Date

2026-08-12

Peer reviewed

Case Presentation

A 43-year-old male with no known prior liver disease presented from an outside hospital with acute liver failure. One month earlier, he had developed nausea, vomiting, and jaundice, with labs showing elevated bilirubin and transaminases. Workup for viral, autoimmune, metabolic, and infectious etiologies was negative. He denied recent alcohol use but reported drinking 3–4 cups of homemade kombucha daily. Testing revealed the homemade beverage unknowingly contained ~4–5% alcohol. PETH levels were elevated, and liver biopsy was consistent with alcohol-associated hepatitis and cirrhosis.

Discussion

This case highlights diagnostic challenges when alcohol history is unclear. While patient perception of abstinence initially obscured the etiology of his liver failure, objective findings, and the discovery of significant alcohol content in homemade kombucha clarified the diagnosis. Home fermentation can yield unpredictable alcohol levels, potentially contributing to unintentional chronic alcohol exposure. Misconceptions about “health” beverages and lack of perceived intoxication may delay recognition of harm.

Conclusions

Homemade kombucha may be an underrecognized source of clinically significant alcohol exposure. Careful dietary and social history, combined with objective biomarkers, is essential in identification of liver injury. Patients with or at risk for liver disease should be counseled on the variable alcohol content of fermented beverages and advised to avoid or closely monitor homemade products.