



A Rare case of Severe Acute Liver Injury caused by single use of Lepidium meyenii (Maca) Medicinal Liquor

Saraswathi Lakkasani MD¹., Dilesha D.Kumanayaka MD¹., Mehul Shah MD¹., Yatinder Bains MD¹.

1. Saint Michael's Medical Center in affiliation with New York Medical College, Newark, New Jersey.

Corresponding Author: Saraswathi Lakkasani MD, 1. Saint Michael's Medical Center in affiliation with New York Medical College, Newark, New Jersey.

Copy Right: © 2022 Saraswathi Lakkasani MD, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received Date: October 10, 2022

Published Date: November 01, 2022

Introduction

Drug-induced liver injury (DILI) has been gaining more attention due to adverse reactions of many herbal supplements. Maca has been widely used as a dietary supplement due to its high nutritional value but its safety and efficacy is not well defined. Maca is generally obtained without prescription and taken without specific medical advice or monitoring. We present a rare case of acute liver injury caused by single use of Maca.

Case Presentation

A 45-year-old male with no known past medical history presented with worsening constipation and abdominal pain for a week. Pt denies any other complaints and only positive history was he took a GNC Herbal Plus Maca Root 525mg capsule about a week ago. No known hepatotoxic medications had been taken. He had no history of liver disease. Physical exam within normal limits. Labs showing AST (Aspartate Aminotransferase) /ALT (Alanine Aminotransferase) were significantly elevated at 2652/1406 U/L respectively. Alkaline phosphatase was elevated at 201 and Viral hepatitis panel came back negative. Patient had normal results of liver function test recorded three months ago. CT (Computed Tomography) imaging of abdomen/pelvis with contrast was unremarkable. AST/ALT/ALP trended down after discontinuing this herbal supplement. Complete Blood Count, albumin, total bilirubin and coagulation panel were unremarkable. Anti-smooth muscle antibodies were slightly elevated. Liver biopsy is consistent with drug induced liver injury. Pt is followed in outpatient clinic with supportive care and liver enzymes trended down slowly.

Discussion

This case highlights the importance of awareness of this issue with use of Maca, which can lead to new approaches for the monitoring and regulation of it to ensure their safety. However, it is also important to exclude other causes of acute hepatitis prior to concluding that it is most likely due to Maca use. The mechanisms by which Maca cause liver injury are unclear and require exploration.

References

1. Bailey, R. L., Gahche, J. J., Lentino, C. V., Dwyer, J. T., Engel, J. S., Thomas, P. R., Betz, J. M., Sempos, C. T., & Picciano, M. F. (2011). Dietary supplement use in the United States, 2003-2006. *The Journal of nutrition*, 141(2), 261–266.
2. Fulgoni, V. L., 3rd, Keast, D. R., Bailey, R. L., & Dwyer, J. (2011). Foods, fortificants, and supplements: Where do Americans get their nutrients? *The Journal of nutrition*, 141(10), 1847–1854.
3. Gonzales, G. F., Villaorduña, L., Gasco, M., Rubio, J., & Gonzales, C. (2014). Maca (*Lepidium meyenii* Walp), una revisión sobre sus propiedades biológicas [Maca (*Lepidium meyenii* Walp), a review of its biological properties]. *Revista peruana de medicina experimental y salud publica*, 31(1), 100–110.
4. Navarro, V. J., & Lucena, M. I. (2014). Hepatotoxicity induced by herbal and dietary supplements. *Seminars in liver disease*, 34(2), 172–193.
5. Xiao, A., He, H. Y., Chen, Q., & Ma, S. W. (2017). Drug-induced Liver Injury Due to *Lepidium meyenii* (Maca) Medicinal Liquor. *Chinese medical journal*, 130(24), 3005–3006.