A CASE OF HEPATITIS ASSOCIATED WITH LONG-TERM USE OF CIMICIFUGA RACEMOSA
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Although several cases of liver damage after C. racemosa...
We wish to applaud the efforts these authors made to publish this purported case of black cohosh–induced hepatitis, as case reports can play an important role in monitoring the safety of dietary supplements; however, it also reflects some of the significant challenges that still exist with adverse event reporting of herbal products. Upon this patient’s admission and during her hospitalization for acute hepatitis, no one inquired about her use of botanical medicines. It is disappointing that physicians continue to neglect this important part of the medical history. Ten months after the patient’s hospital discharge with persistently elevated liver enzymes, she disclosed that she “believed” she had been taking black cohosh for approximately 18 months. She then experienced a complete recovery within 4 weeks of discontinuing the herbal product. Given the temporal relationship of resolution after discontinuation, it is possible—even probable—that her hepatitis may have been linked to the herbal product she was taking, but we have no way of knowing whether it was due to black cohosh. This case report could have been dramatically strengthened with just a little more investigation to establish the name of the manufacturer and product, type of product (ie, capsule, tincture, etc), and dose. Though this would not necessarily guarantee that the product contained C. racemosa, it would have allowed further investigation into the manufacturer’s quality control procedures and assisted in the identification of any possible contaminants or adulterants in the supply chain.

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sumption have been published, a recent 12-month follow-up on 107 women showed a favorable risk/benefit profile of C. racemosa rhizome in terms of liver injury and also that it is well tolerated by patients with preexisting mild liver impairment. The case reported here seems to support the hypothesis that C. racemosa may be toxic to the liver in some individuals when consumed for a long period of time. This phenomenon has a possible biological explanation, comprising both indirect and direct mechanisms. C. racemosa has been shown to contain catechols and phenols, which can be transformed into quinone-type intermediates. Although documented in vitro for their liver toxicity potential, this effect has not been demonstrated in vivo. Other components of C. racemosa, such as diterpenoids, may cause liver injury in animal models, either by reactive metabolites or by an autoimmune mechanism. Recent findings also suggest this possibility since actein, dextrain, and cimicifacemic, the most abundant triterpene glycosides contained in C. racemosa rhizome extract, are growth inhibitors of human cancer cells through the arrest of cell cycle at G16. This mechanism could also lead to hepatocyte apoptosis. Therefore, although the degree of hepatic toxicity of C. racemosa seems scarcely clinically relevant, it may become important in patients with predisposing factors, thus being classifiable as an idiosyncratic adverse event. This might also be linked to genetic variants in liver enzymes metabolizing active compounds of the herb.

This case report is limited by the fact that the medication the patient was taking was not retrieved and sent for analysis and that the exclusion of several risk-factors for liver disease was only by self-report; however, the patient was evaluated for several weeks in the infectious diseases section of a department specializing in liver pathology, thus ensuring that the diagnosis of hepatitis, as well as the differential diagnosis, was correct and other potential causes, such as other concurrent agents, alcohol or substance abuse, and infectious disease, were excluded. The present report suggests the importance of conducting a thorough medical investigation of complementary and alternative medication use. We suggest that subjects suffering from liver pathologies should consider avoiding the use of C. racemosa until they have discussed it with a qualified practitioner and undergone appropriate laboratory examination of their liver enzymes.

REFERENCES