AACT Herbal Dietary Supplement Section Abstracts

May-July 2025

1. **Acute Central Toxic Keratopathy Induced by Exposure to Chinese Herbal Medicine Fluid for Verruca Plana: A Case Report.** Case Rep Ophthalmol Med. 2025 Jul 22;2025:8657147. doi: 10.1155/crop/8657147.

   Zhang S, Tao Y

   Purpose: The purpose of this study was to report a case of acute central toxic keratopathy due to exposure to Chinese herbal medicine fluid treating verruca plana. Methods: A 46-year-old woman presented with pain and blurred vision in her right eye for 3 days. Her right eye was unintentionally exposed to a medication in liquid form treating the verruca plana on her eyelids. The drug was a compound preparation with complex Chinese herbal medicinal ingredients. Results: Slit lamp examination showed central diffuse corneal subepithelial haze with granular shapes and anterior stromal opacity. Corresponding with her clinical manifestations, anterior segment optical coherence tomography revealed diffuse abnormal highly reflective signal in the anterior stroma within 349 μm and in vivo confocal microscopy found inflammatory infiltration in the subepithelial and the anterior stromal layer. Thus, tobramycin dexamethasone eye drops and artificial tears were prescribed for her, which proved effective. Her clinical symptoms and signs were both resolved after steroid treatment and remained stable at the 1-month follow-up. Conclusion: Acute central toxic keratopathy could occur after exposure to Chinese herbal medicine fluid, and enhanced topical steroid treatment worked well for alleviating inflammation and reducing corneal opacity.

   DOI: DOI: 10.1155/crop/8657147 | PMID: 40741151 | PMCID: PMC12308051

2. **Kratom-Association Acute Right Ventricular Dysfunction: Diagnostic and Management**. JACC Case Rep. 2025 Jul 23;30(20):104206. doi: 10.1016/j.jaccas.2025.104206.

   Alameh I, Lebedev MV, Clark JM, Kamareddine M, Ferrara D, DeLorenzo O, Sidhu BV, Heric A.

   BACKGROUND: Kratom (Mitragyna speciosa) is a psychoactive herbal supplement with
   stimulant and opioid-like properties, with emerging reports linking it to cardiovascular toxicity. However, its association with right ventricular (RV) function remains unclear.
   CASE SUMMARY: We report the case of a 52-year-old man who presented in shock with hypoxia and multiorgan dysfunction. Echocardiography revealed severe RV dilation with McConnell's sign, whereas chest computed tomography angiography

ruled out pulmonary embolism. Right heart catheterization confirmed elevated right-sided pressures and high cardiac output consistent with high-output RV failure.
DISCUSSION: Despite intermittent Kratom use, other etiologies, including thyrotoxicosis, arteriovenous fistula, liver disease, thiamine deficiency, and infection, were systematically excluded. With supportive management, including inotropic therapy, the patient's RV function recovered.
TAKE-HOME MESSAGES: This case emphasizes the importance of recognizing Kratom as a potential factor in unexplained acute RV dysfunction. It highlights the value of prompt echocardiographic and hemodynamic assessment in guiding effective management.

DOI: DOI: 10.1016/j.jaccas.2025.104206 | PMID: 40713117

3. **A Case of Hypokalemia Caused by the Consumption of Licorice-Containing Herbal Tea**. Cureus. 2025 Jun 16;17(6):e86154. doi: 10.7759/cureus.86154. eCollection 2025

   Saha P, Aydin-Ghormoz E, Beers K, Abid S.

   Hypokalemia can have many etiologies, of which licorice toxicity is notable but often overlooked. Licorice is being increasingly used as a component in herbal formulations and holistic remedies. We present a case of licorice-induced hypokalemia due to herbal tea formulation in a patient with a history of type 2 diabetes mellitus and metastatic adenocarcinoma. This case highlights a unique presentation of pseudo-hyperaldosteronism due to licorice consumption with concurrent use of a sodium-glucose cotransporter (SGLT2) inhibitor, requiring a high index of suspicion for diagnosis. Glycyrrhetinic acid (GA) is one of the active metabolites of licorice, which is responsible for intracellular cortisol accumulation and activation of mineralocorticoid receptors. Therefore, in addition to removing the offending agent, mineralocorticoid receptor antagonists can also be used in treatment.

   DOI: DOI: 10.7759/cureus.86154 | PMID: 40672027 | PMCID: PMC12266736

4. **Severe Drug-Induced Dermatosis in a Geriatric Patient: A Case Report.** Cureus. 2025 Jul 12;17(7):e87781. doi: 10.7759/cureus.87781. eCollection 2025

   Saldaña Guerrero S, Lanzarin Quezada SC, Torres Salazar QL

   Older adults are particularly vulnerable to adverse drug reactions (ADRs) due to age-related physiological changes and polypharmacy. Among these, drug-induced dermatoses are common but often underdiagnosed, especially when presentation is atypical or when patients use unregulated treatments. We report the case of a 71-year-old woman who developed erythroderma, pruritus, and desquamation following the use of prescribed medications alongside topical and herbal self-medication.

Hospitalization was required after outpatient treatment failed. Skin biopsy revealed an acute inflammatory pattern consistent with pharmacodermia. Conservative treatment with systemic corticosteroids and topical emollients achieved full remission without complications. This case highlights the diagnostic complexity of ADRs in older adults, particularly in the context of incomplete medication histories and the use of natural products. It emphasizes the need for heightened clinical suspicion, thorough medication review, and pharmacovigilance to prevent escalation of cutaneous toxicity in the elderly.

DOI: DOI: 10.7759/cureus.87781 | PMID: 40655062 | PMCID: PMC12255369\

5. **Multimodal Management of Refractory Ventricular Tachycardia Due to Aconitine Poisoning: A Case Report in a Resource-Limited Setting.** J Am Coll Emerg Physicians. doi: 10.1016/j.acepjo.2025.100171. eCollection 2025 Aug.

   Sitthiprawiat P, Wittayachamnankul B, Laohakul P.

   Aconitine, a potent plant alkaloid used in traditional Asian medicine, possesses significant toxicity risks. This case report presents a 42-year-old male with alcohol use disorder who developed life-threatening ventricular tachycardia after ingesting a homemade herbal liqueur. Initially thought to contain Cassia alata (candle bush), further investigation revealed that the tincture was instead prepared from Aconitum root (Wolfsbane) based on advice from an online social media video. He subsequently developed life-threatening ventricular tachycardia and cardiac arrest refractory to initial interventions. In the absence of extracorporeal membrane oxygenation (ECMO), flecainide, or procainamide, a multimodal approach involving multiple antiarrhythmics, including amiodarone, phenytoin, and stellate ganglion block, ultimately restored normal sinus rhythm. This case underscores the importance of early recognition and a flexible, multimodal treatment strategy in managing aconitine-induced arrhythmias, especially in resource-limited settings.

   DOI: DOI: 10.1016/j.acepjo.2025.100171 | PMID: 40574793 | PMCID: PMC12197892

6. **Herbal hazards: Unveiling the dark side of unknown botanical remedies.** Explore (NY). 2025 Jul-Aug;21(4):103191. doi: 10.1016/j.explore.2025.103191. Epub 2025 May 17.

   Lucamba A, Grillo R, Filipe L, Aparecida Brozoski M

   OBJECTIVE: In some areas, patients often turn to traditional remedies, including local herbs, due to the lack of medical resources. However, the flora in many regions remains largely uncataloged, posing significant risks due to the unknown properties and potential toxicities of these plants.

CASE REPORT: The case report presented describes a female patient from Angola who suffered severe facial disfigurement and visual impairment after using filanganga to treat an odontogenic abscess. The herb's corrosive effects underscore the dangers of unverified traditional remedies. This case highlights the critical need for healthcare professionals to be aware of the potential risks associated with unclassified herbs, particularly in regions where traditional medicine is prevalent.
CONCLUSION: The article advocates for comprehensive research to catalog local flora and for public health campaigns to educate patients on the risks of using unverified herbal treatments. The conclusion emphasizes the importance of balancing respect for cultural practices with the need for scientific validation to ensure patient safety.

DOI: DOI: 10.1016/j.explore.2025.103191 | PMID: 40403347 [Indexed for MEDLINE]

7. **Ribociclib-Induced hepatotoxicity exacerbated by fenugreek supplement use: A case report** J Oncol Pharm Pract. 2025 Sep;31(6):1018-1023. doi: 10.1177/10781552251340911. Epub 2025 May 19.

Al Harrak Y, Lkhoyaali S, Lamsyah O, Tine MM, Bechar H, Benabdallah G, Sefiani H, Boutayeb S, Errihani H.

Background Cyclin-dependent kinase 4 and 6 (CDK4/6) inhibitors, such as ribociclib, are the cornerstone of treatment for estrogen receptor-positive (ER+), human epidermal growth factor receptor 2-negative (HER2-) metastatic breast cancer. However, ribociclib is known to cause hepatotoxicity, and the role of other dietary supplements in this process is not well understood.
Case Presentation A 47-year-old woman with metastatic breast cancer experienced grade III hepatotoxicity shortly after starting ribociclib. Despite discontinuing the drug, transaminase levels remained elevated. Using the the Roussel Uclaf Causality Assessment Method (RUCAM), a probable drug-induced liver injury was identified (score: 6). Upon disclosure of concurrent use of a fenugreek-based supplement, the revised RUCAM score dropped to 4. Further anamnesis revealed concurrent intake of a fenugreek-based supplement, prompting a revised RUCAM score of 4. The Naranjo Adverse Drug Reaction Probability Scale also indicated a possible association (score: 4). In contrast, the Drug Interaction Probability Scale (DIPS) scored 5, suggesting a probable herb-drug interaction between ribociclib and fenugreek.
Management and Outcome Transaminase levels gradually returned to normal within eight weeks of stopping ribociclib and four weeks after discontinuing the fenugreek supplement. The patient was counseled to avoid herbal supplements and initiated on palbociclib as an alternative CDK4/6 inhibitor. Liver function remained stable with no recurrent hepatotoxicity.
Discussion Fenugreek modulates CYP3A4, which metabolizes ribociclib. This case highlights underrecognized herb-drug interactions inoncology.

DOI: DOI: 10.1177/10781552251340911 | PMID: 40388649 [Indexed for MEDLINE]

8. **Poisoning from Alocasia × amazonica Roots: A Case Report.** Toxins (Basel). 2025 Apr 10;17(4):189. doi: 10.3390/toxins17040189.

   Stoeva-Grigorova S(1), Dragomanova S, Radeva-Ilieva M, Kehayova G,Dimitrova S, Marinov S, Marinov P, Yovcheva M, Ivanova D, ZlatevaS

   All parts of Alocasia × amazonica (A. amazonica, Araceae) pose a toxicological risk due to oxalate production. Ingestion of the plant extract may cause multi-organ damage and fatal outcomes. Given the rarity of poisoning cases, its toxicological profile and systemic effects remain insufficiently characterized. This study aimed to investigate and report an appropriate approach to managing a patient intoxicated with A. amazonica (Araceae). A case of intentional self-poisoning with A. amazonica is presented. The patient, a 63-year-old woman, ingested approximately 200-300 mL of liquid prepared from the grated root of the plant. The initial clinical presentation involved localized injuries to the oral cavity and gastrointestinal tract, including severe pain, hoarseness, aphonia, dysphagia, mucosal erosions, and necrosis. Additional symptoms included hematinic vomiting, hemorrhagic diarrhea, and abdominal discomfort. These superficial and mucosal lesions resolved without the development of adhesions. Systemic effects comprised impaired consciousness indicative of encephalopathy, early metabolic acidosis, pulmonary edema with acute respiratory insufficiency, mild liver dysfunction, and hematuria. The therapeutic protocol for oral poisoning management was appropriate, leading to the patient's discharge after 20 days of hospitalization.

   DOI: DOI: 10.3390/toxins17040189 | PMID: 40278687 [Indexed for MEDLINE] | PMCID: PMC12031045

9. **Hepatotoxicity induced by MK-677**. BMJ Case Rep. 2025 Jul 17;18(7):e265728. doi: 10.1136/bcr-2025-265728.

   Cobani E, Amin MS, Hasso M, Kumbar L.

   MK-677, a growth hormone secretagogue, is gaining popularity among performance-enhancing supplements. While its side effects include oedema, increased appetite and muscle pain, reports of hepatotoxicity are scarce. Here we present the case of an otherwise healthy man in his early 30s, who developed transaminitis after consuming MK-677 for 2 months before presentation. Liver function tests eventually returned to normal limits after stopping the supplement.
   DOI: DOI: 10.1136/bcr-2025-265728 | PMID: 40675653 [Indexed for MEDLINE]

10. **The Adverse Effects of Artri King: A Systematic Review and Case Series**. South Med J. 2025 Jul;118(7):376-381. doi: 10.14423/SMJ.0000000000001851.

    Chun M, Sutton J, Chung J, Lazarte J, Horvath A, Elmer M, Aboaid H, Hanif B.

    There has been an uptrend in patients taking Artri King, an over-the-counter supplement marketed for joint pain despite Food and Drug Administration warnings of it containing undeclared substances such as diclofenac and dexamethasone. Despite the popularity of this supplement, there is a lack of awareness of the deleterious, adverse effects. To our knowledge, there has not been a systematic review evaluating outcomes of patients taking Artri King. A comprehensive literature search was performed from major databases from inception to June 17, 2024, including case studies or case series investigating outcomes of patients taking Artri King as a supplement or treatment. A total of 16 patients (12 female and 4 male) from 10 studies were included in our literature review, with four of those patients being from our home institution. Patients presented with a wide variety of chief complaints, but fragility fractures were the most common at our home institution. The average duration of Artri King use was 16.67 months (at our home institution) versus 13.35 months for the rest. Overall, 75% of the patients included were diagnosed as having Cushing syndrome. Serious adverse effects of taking Artri King include Cushing syndrome, adrenal insufficiency, and worsening hyperglycemia. Clinicians should obtain a thorough drug and
    supplement history, and we recommend informing patients of the serious adverse effects associated with Artri King and advise against its use.

    DOI: DOI: 10.1136/bcr-2025-265728 | PMID: 40675653 [Indexed for MEDLINE]

11. **Reversible coagulopathy associated with vitamin E excess.** BMJ Case Rep. 2025 Jun 10;18(6):e265116. doi: 10.1136/bcr-2025-265116.

    Green TD, Williams DM, Sharman J, Stephens JW.

    Vitamin E refers to a group of compounds that are essential to the diet of animals, where its primary function is an antioxidant. Excessive vitamin E supplementation can cause a reversible coagulopathy in the setting of compromised vitamin K absorption or function. We describe the case of a woman in her mid-80s treated for micronutrient deficiencies following a biliopancreatic diversion as a bariatric procedure 14 years previously. Her coagulation tests were normal until she commenced vitamin E and accidentally over-administered the prescribed dose. This resulted in a coagulopathy, characterised by a prolonged international normalised ratio (INR) and activated partial thromboplastin time (APTT). The patient never had any signs of active bleeding. Both coagulation parameters normalised after stopping the vitamin E and with vitamin K supplementation. This case signifies the importance of careful instruction and monitoring of vitamin replacement, in particular vitamin E supplementation, which in excess leads to coagulopathy.

12. **Immunoglobulin A vasculitis and pustular psoriasis precipitated by Tawon Liar: a case report.** J Med Case Rep. 2025 May 30;19(1):259. doi: 10.1186/s13256-025-05167-

    Zha M, Ding DD.

    BACKGROUND: Unregulated herbal supplements can pose significant health risks due to undisclosed ingredients. Tawon Liar, an Indonesian product marketed as an "all-natural" remedy, claims to alleviate pain and boost immunity but lacks stringent regulatory oversight. We report a unique case of Tawon Liar-induced Immunoglobulin A (IgA) vasculitis and exacerbation of psoriasis, highlighting the potential dangers associated with misadvertised supplements.
    CASE PRESENTATION: A 53-year-old migrant worker from Mexico with a history of psoriasis and ankylosing spondylitis, effectively managed with adalimumab, presented with new-onset rashes on his extremities. Physical examination revealed palpable purpura on the lower legs and erythematous papules and plaques with pustules on the upper extremities. Dermoscopic analysis suggested IgA vasculitis and pustular psoriasis. The patient denied recent infections, new medications, or over-the-counter drug use. However, after thorough questioning, it was revealed that he had been intermittently ingesting Tawon Liar for chronic musculoskeletal pain. The supplement, obtained from a coworker, contained undisclosed ingredients including meloxicam, ketorolac, and dexamethasone. Laboratory tests ruled out renal involvement, and biopsies were not performed due to financial constraints. The patient was advised to discontinue Tawon Liar and was treated with topical corticosteroids, leading to substantial improvement and resolution of symptoms within one week.
    CONCLUSIONS: This case underscores the potential dangers of herbal supplements containing hidden pharmacologic agents. It highlights the need for clinicians to diligently inquire about supplement use during patient evaluations, especially for vulnerable populations facing language barriers and limited access to healthcare. Public health authorities should enhance efforts to disseminate drug safety information across diverse languages and platforms to mitigate health risks associated with such products.

    DOI: DOI: 10.1186/s13256-025-05167-5 | PMID: 40448236 [Indexed for MEDLINE] | PMCID: PMC12124056

13. **Grayanotoxins in Mad Honey: Mechanisms of Toxicity, Clinical Management, and Therapeutic Implications**. J Appl Toxicol. 2025 Jul 9. doi: 10.1002/jat.4855. Online ahead of print.

    Aryal M

    Mad honey, primarily derived from the nectar of Rhododendron species, has been used for centuries in traditional medicine due to benefits in managing hypertension,

diabetes, and gastrointestinal disorders. However, its consumption carries health risks, including dizziness, hypotension, bradycardia, and, in severe cases, life-threatening cardiac complications. This review synthesizes research on the chemical composition and toxicological effects of mad honey, with a focus on grayanotoxins (GRAYs), key bioactive compounds responsible for its dual therapeutic and toxic effects. It examines regional variations in honey toxicity, particularly in endemic areas such as Nepal and Turkey, where traditional use persists. Additionally, the study explores the mechanisms of GRAY-induced toxicity, emphasizing its action on voltage-gated sodium channels (VGSCs), which leads to prolonged depolarization and autonomic dysfunction. Clinical case studies highlight the cardiovascular and neurological manifestations of mad honey poisoning, alongside current diagnostic management strategies, including atropine administration and supportive care. Despite its risks, emerging evidence suggests potential therapeutic applications, underscoring the need for standardized dosing, regulatory oversight, and public awareness. This study aims to inform healthcare professionals, researchers, and policymakers about the delicate balance between the medicinal benefits and hazards of mad honey, advocating for further research to optimize its safe use.

DOI: DOI: 10.1002/jat.4855 | PMID: 40635392

14. **Herb-drug interactions in oncology: pharmacodynamic/pharmacokinetic mechanisms and risk prediction**. Chin Med. 2025 Jul 7;20(1):107. doi: 10.1186/s13020-025-01156-4.

Duan X, Fan X, Jiang H, Li J, Shen X, Xu Z, Zhou Z, Xu J, Chen C, Jin H.

The prevalence of herbal medicines has gained widespread, particularly among cancer patients seeking adjunctive therapies. Co-administered with anticancer drugs (ACDs) frequently, herbal medicines result in increasing cases of herb-drug interactions (HDIs), following the serious clinical consequences. While herbal medicines pose negative impacts, such as limiting efficacy and increasing toxicity of ACDs, they also offer potential benefits, including enhancing bioavailability, reducing adverse reactions, and reversing tumor drug resistance. This review is the first to systematically characterize HDI molecular mechanisms at both pharmacodynamic (PD) and pharmacokinetic (PK) levels, elucidating how herbal medicines modulate ACDs efficacy and safety through antagonism/synergy/detoxification target, metabolic enzymes, and transporters. In particular, emerging risk prediction methodologies are proposed to assess the clinical occurrence of potential PD/PK-mediated HDIs. We provide a novel insight for promoting the mechanism study of HDIs, facilitating the safe and effective integration of herbal medicines into cancer treatment.
DOI: DOI: 10.1186/s13020-025-01156-4 | PMID: 40624553 | PMCID: PMC12232703

15. **Evaluating the drug interactions in kratom usage: clinical application.** Expert Opin Drug Metab Toxicol. 2025 Aug;21(8):949-959. doi: 10.1080/17425255.2025.2521045. Epub 2025 Jun 22.
    Dhoble LR, Gour A, McCurdy CR, Sharma A.
    INTRODUCTION: Mitragyna speciosa (Korth.) Havil. (Rubiaceae), commonly known as kratom, is a tropical tree native to Southeast Asia, traditionally used for its diverse ethnopharmacological activities, including analgesic and anxiolytic effects. Kratom's unique pharmacological profile allows it to function as a stimulant at low doses and produces opioid-like effects at high doses, making it a potential alternative for pain management and mitigation of opioid use disorder.
    AREAS COVERED: Google Scholar and PubMed, along with FAERS database, were systematically searched to evaluate the clinical applications of kratom by examining its drug interactions, which can significantly impact the pharmacokinetics and pharmacodynamics of concomitant medications. By examining current evidence, this review aims to highlight the importance of establishing safe clinical practices and protocols for healthcare providers and patients.
    EXPERT OPINION: Evaluating drug interactions in kratom usage is clinically imperative because kratom's bioactive alkaloids can interact with the pharmacokinetic and pharmacodynamic processes of concurrent medications, potentially resulting in adverse effects or compromised therapeutic outcomes. This review presents an expert opinion on the clinical relevance of kratom's interactions with drugs, aiming to inform clinical practice, highlight ethical and regulatory considerations, and propose future research directions to improve the understanding of kratom's pharmacological profile and enhance user safety.
    DOI: DOI: 10.1080/17425255.2025.2521045 | PMID: 40522665 [Indexed for MEDLINE] | PMCID: PMC12278816

16. **Prolonged Serotonergic Symptoms in a Pediatric Patient: Suspected Interaction Between Prescription Medications and Kava Supplement.** Cureus. 2025 May 12;17(5):e83966. doi: 10.7759/cureus.83966. eCollection 202
    DOI: DOI: 10.7759/cureus.83966 | PMID: 40510098 | PMCID: PMC12159272
    Peredy TR, Lund J, Samai K.
    Kava (Piper methysticum) is consumed for a variety of medical and cultural purposes. It is reported to have anxiolytic, muscle relaxant, local anesthetic, and sedative properties. The unregulated use of kava has grown more popular in the United States for a variety of indications and often in combination with traditional pharmaceuticals. A review of existing literature revealed no prior reports of adverse effects from concurrent use of kava and serotonergic agents. We present a pediatric patient who developed prolonged serotonin syndrome after daily use of kava while transitioning from duloxetine to venlafaxine. A 16-year-old female patient presented to the emergency department with complaints of facial twitching, palpitations, increased anxiety, restlessness, and diaphoresis. Her vital signs were remarkable for tachycardia. Physical examination revealed hyperreflexia and involuntary muscle movements. Her home medications included duloxetine, venlafaxine, aripiprazole, and zolpidem. Over

the prior month, the patient had begun taking two different kava preparations for her anxiety. Symptoms were refractory to typical escalating doses of cyproheptadine (18 mg within the first 24 hours) and benzodiazepines (6 mg within the first 24 hours), despite the patient being benzodiazepine naïve. The patient required treatment for 72 hours following discontinuation of serotonergic agents. This case highlights the importance of pharmacovigilance for significant interactions between herbal products and psychotropics. Several kavalactones have demonstrated significant CYP2D6 and monoamine oxidase inhibition, which in this case may have led to higher neuronal cleft serotonin-norepinephrine reuptake inhibitor drug and active metabolite concentrations. Clinicians should advise patients to limit the use of kava supplements while taking certain prescribed serotonergic medications.
DOI: DOI: 10.25259/IJN_321_2024 | PMID: 40352902 | PMCID: PMC12065597

17. **Nature's Cure or Kidney Curse? The Nephrotoxic Potential of Indigenous Remedies.** Indian J Nephrol. 2025 May-Jun;35(3):335-342. doi: 10.25259/IJN_321_2024.
Sethi J, Anandh U, Jha V.

Traditional medicine refers to a diverse range of health and healing practices used by Indigenous peoples that incorporate plants, animals, and the spiritual realm for the diagnosis and treatment of illness or maintenance of health and well-being. While these practices hold significant cultural value, there is growing evidence of potential nephrotoxicity associated with some traditional indigenous medicines (TIMs). In this review, we explore the various clinical manifestations of nephrotoxicity induced by TIMs. Nephrotoxicity can result from various factors, including the intrinsic toxicity of certain herbs, contamination with heavy metals, inappropriate dosages, and interaction with conventional medications. This review highlights the importance of monitoring kidney function in patients using TIMs and calls for increased awareness and regulation to ensure the safe use of these traditional therapies.
2025 Feb 5.

DOI: DOI: 10.1016/j.soncn.2025.151816 | PMID: 39909819 [Indexed for MEDLINE]

18. **Analysis of YouTube Videos on Herbal Approaches Used in Coping with Cancer.** Semin Oncol Nurs. 2025 Apr;41(2):151816. doi: 10.1016/j.soncn.2025.151816. Epub
Akyuz Ozdemir F, Yildirim D

OBJECTIVE: The use of herbal approaches is very common among cancer patients. Patients obtain information about herbal products mostly from YouTube. However, toxicity and complications may develop as a result of unconscious use of herbal products. This study was conducted to evaluate the scope, validity, reliability and quality of English language videos on YouTube about herbal approaches to cope with cancer. METHODS: The present descriptive study analyzed a total of 62 YouTube videos. All videos published on YouTube until 10 January 2024 were watched as a

result of a search with English words 'herbal approaches for cancer treatment' and 'herbal approaches for medicine' . The 62 videos that met the inclusion criteria were assessed for reliability, quality, and content by 2 independent reviewers by using the Global Quality Score, DISCERN, JAMA scales and Herbal Approaches Checklist. The results indicated that the videos included in the study exhibited moderate quality.
RESULTS: Of the analyzed videos, 53.2% were found to be informative and 46.8% were found to be misleading. It was established that 59.7% (n=37) of the videos recommended the use of herbs that are known to be incompatible with chemotherapy.
CONCLUSIONS: It was concluded that the majority of the videos on YouTube about herbal approaches had low accuracy, low quality and insufficient information level. In addition, the use of many herbal products incompatible with cancer type and treatment was recommended. However, the level of knowledge of health professionals regarding herbal approaches should also be taken into consideration and it should be recommended that health professionals with expertise in this field inform patients.
IMPLICATIONS FOR NURSING PRACTICE: Nurses should educate patients about herbal
approaches and guide them in evaluating the reliability of online sources. They should stay updated through continuous education on herbal products and collaborate with other healthcare professionals to prevent potential herb-drug interactions.

19. **Underestimated pyridoxine consumption and neurotoxicity: a novel manifestation with rheumatologic relevance - a case-based review.**
Rheumatol Int. 2025 May 26;45(6):144. doi: 10.1007/s00296-025-05900-9. 2024;62 (Suppl 1)(XXV KONGRES

Kościńska-Shukla I, Jaskólska M, Grochowalska K, Okrój M, Chmielewski M.

The impact of vitamin B complex has long been studied and utilized in clinical practice, both for healthy and diseased individuals. Its beneficial effects on physical and mental performance have been proven by multiple studies leading to widespread supplementation among the general population. As of today's knowledge, vitamin B6 (pyridoxine) in excessive doses may lead to symptoms of neuropathy. Unfortunately, many of those supplementing vitamin B complex are unaware of such a risk. This case-based review presents three patients who initially searched for help due to neuropathic symptoms with the rheumatological diagnostic process following. All of them had a history of excessive vitamin B6 consumption, though through different sources. Cessation of supplementation led to prompt improvement in symptoms. These cases stress the importance of in-depth history taking and specifying instructions regarding prescribed supplements. The novelty of this article lies in the description of a patient who reported symptoms associated with central nervous system with concomitant abnormalities of the complement system, all of which resolved spontaneously upon normalization of pyridoxine concentration.

PMID: 40418248 [Indexed for MEDLINE] | PMCID: PMC12106547

20. **Impact of whey protein on lipid profiles: A systematic review and meta-analysis.** Nutr Metab Cardiovasc Dis. 2025 Jun;35(6):103858. doi: 10.1016/j.numecd.2025.103858. Epub 2025 Jan 6.
Gataa IS, Abdullah Z, González Cabrera MV, S R, Verma S, Arora I, Monsi M, Muzammil K(8), Zainul R.

AIMS: This research delved into a comprehensive examination and detailed analysis of the effects of whey protein (WP) supplementation on lipid profile in adults.
DATA SYNTHESIS: Data used in this research was obtained from diverse clinical trials. Thorough searches were carried out on multiple electronic platforms including PubMed, Embase, Web of Science, Scopus, Google Scholar, and the Cochrane Library from their inception until May 2024. Random effects models were assessed and pooled data were determined as weighted mean differences (WMDs) with a 95 % confidence interval (CI).
RESULTS: Overall, 20 randomized clinical trials (n = 1638 participants) met our inclusion criteria. The current meta-analysis demonstrates a significant reduction in TG (WMD: -12.21 mg/dL; %95CI: -20.16, -4.26; P = 0.003). Pooled analysis of 19 studies on HDL-c indicated a significant increase (WMD: 2.59 mg/dL; %95CI: 1.11, 4.07; P = 0.001).
CONCLUSIONS: We found that WP intake can improve TG and HDL-c significantly without significant effects on TC, and LDL-c levels. However, future well-designed with long duration RCTs is required on diverse populations to understand better the effects of these natural compounds and their constituents on lipid profile in adults.

DOI: DOI: 10.1016/j.numecd.2025.103858 | PMID: 39939251 [Indexed for MEDLINE]

21. **A multi-detector analytical approach for characterizing complex botanical extracts: a case study on ashwagandha** Anal Bioanal Chem. 2025 Sep;417(21):4895-4906. doi: 10.1007/s00216-025-06006-8.

Sica VP, Mitchell CA, Krzykwa J, Baker TR, Waidyanatha S

A comprehensive analytical characterization of botanical extracts can be difficult due to their complexity, dynamic range, and limited availability of constituent standards. By using ashwagandha root extract as a case study, this work showcases how to characterize a botanical extract utilizing an analytical system with multiple detectors to support the development of toxicological tools for evaluating botanicals. The platform incorporated ultra-high-performance liquid chromatography (UHPLC) coupled with photodiode array (PDA) detection, charged aerosol detection (CAD), and high-resolution mass spectrometry (HRMS) detection to generate a detailed chemical profile. This multi-detector platform enabled both semi-quantification and the identification of the majority of constituents, ensuring accurate chemical analysis while

compensating for potential detector biases. The approach provided a thorough fingerprint of the ashwagandha extract, enabling authentication of the material. The generation of a comprehensive fingerprint supports in silico modeling and bioassay-based toxicological evaluations of botanicals, particularly in the context of dietary supplement safety. This study demonstrated the utility of detailed chemical analysis supporting the authenticity of ashwagandha root extract and the advancement of tools needed for robust safety assessments of botanical products by providing the semi-quantification and identification of over 60 constituents in ashwagandha extracts.

DOI: DOI: 10.1007/s00216-025-06006-8 | PMID: 40695986 [Indexed for MEDLINE] | PMCID: PMC1236791

22. **Adverse reactions of liquorice consumed in the diet: a 10-year retrospective study of poison centres in France.**. Clin Toxicol (Phila). 2025 Jul 21:1-9. doi: 10.1080/15563650.2025.2514643.

Caré W, et al

INTRODUCTION: We aimed to describe the symptoms, patient demographics, and trends over time of adverse effects related to liquorice consumed in the diet reported to French poison centres.
METHODS: We performed a retrospective study of data from French poison centres of cases of adverse effects of liquorice consumed in the diet, with a high causality score, between 2012 and 2021 (10 years).
RESULTS: Sixty-four cases were included. The annual number of cases ranged from three to nine, with no significant variation over the study period. Liquorice-induced reactions were very rare (0.008% of all cases with symptoms reported to French poison centres). The products consumed were non-alcoholic beverages (non-alcoholic pastis, liquorice-based Antésite®, and liquorice syrup), alcoholic beverages of the pastis type (10.9%), confectionery containing liquorice (12.5%), confectionery made with liquorice extract only (9.4%), herbal teas (12.5%) and food supplements (4.7%). Consumption was commonly chronic (67.2%) and non-compliant (70.3%). Chronic users presented with symptoms suggestive of pseudohyperaldosteronism, the severity of which seemed to correlate with the amount of glycyrrhizin ingested. Severity was high in 43.8% of cases. When the outcome was known (56.3%), it was favourable in almost all cases (94.4%), often after inpatient care, particularly in an intensive care unit. One patient had sequelae due to a stroke, and one fatality was reported. Severe cases were observed with all types of products, except liquorice syrup and food supplements, and more frequently with beverages (pastis with or without alcohol, and Antésite®).
DISCUSSION: Due to significant variability in response to glycyrrhizin, some patients presented signs and symptoms suggestive of pseudohyperaldosteronism such as hypokalaemia, salt and water retention, and hypertension despite consuming the product as directed.

CONCLUSIONS: Liquorice-induced effects were rarely reported to French poison centres, but their severity was high. Most patients were adults with chronic and non-compliant consumption, especially of soft drinks, with a clinical presentation suggestive of pseudohyperaldosteronism.

DOI: DOI: 10.1080/15563650.2025.2514643 | PMID: 40689486

23. **Unveiling the hidden risk: Herbal and dietary supplement consumption in liver disease patients.** Gastroenterol Hepatol. 2025 Jul 2:502520. doi: 10.1016/j.gastrohep.2025.502520.

    Canga E, Pocurull A, Rodriguez-Reyes M, Collazos C, Martín L, Mariño Z, Lens S, Forns X.

    INTRODUCTION: The use of herbal products and dietary supplements (HDS) carries a potential risk of liver toxicity. Data on HDS consumption among patients attending liver disease clinics remain unexplored. OBJECTIVE: To determine the frequency, types and reasons for HDS consumption in patients attending a specialized liver disease outpatient clinic. METHODS: Prospective study including consecutive patients attending the hepatology outpatient clinic at the Hospital Clínic of Barcelona from June 2023 to October 2023. Following a standard medical visit, a trained nurse conducted a structured interview to assess HDS consumption. RESULTS: A total of 150 patients were included, with a median age of 59 (IQR: 49-67) and male predominance (56%, n=84). Only 12 patients (8%) reported HDS consumption during a standard medical interview, while the number increased to 92 (61%) after nurse-led structured interview. The primary reasons for dietary supplements use included vitamin supplementation (43%), fitness improvement (10.5%) and hair/nail health (10.5%). For herbal products, the most common reason for use was pleasure (73%). Reported HDS products with potential hepatotoxicity (levels A and B) were green tea (n=16), turmeric with black pepper (n=11), aloe (n=2), greater celandine (n=1) and black cohosh (n=1). CONCLUSION: HDS use is highly prevalent among patients with liver disease, but a structured interview is crucial to detect their consumption, as they usually forget spontaneous reporting. Importantly, a significant proportion of these products carry a risk of hepatic toxicity, underscoring the need for increased patient education and clinical vigilance.

    DOI: DOI: 10.1016/j.gastrohep.2025.502520 | PMID: 40615075

24. **Potential cardiotoxic components of Tripterygium wilfordii Hook. f. prediction and verification through cardiac ion channel proteins** Chem Biol Interact. 2025 Sep 5;418:111627. doi: 10.1016/j.cbi.2025.111627. Epub 2025 Jul 1.

    Sun J, Fan Y, Li X, Qiu Y, Lu Y, Shen Z, Zhang J, Zhao M, Xu Y.

Tripterygium wilfordii Hook. f. has been widely used in clinical practice due to its good anti-inflammatory and analgesic activities. However, the application is limited by some potential toxicity and side effects. Therefore, this study aimed to explore the potential heart risk components and potential mechanism of Tripterygium wilfordii. Traditional Chinese Medicine Database and Analysis Platform (TCMSP), Swiss Target Prediction, GeneCards and Open Target Platform databases were used to obtain the potential targets of Tripterygium wilfordii monomers and arrhythmia. GO pathway enrichment analysis was performed by Sangerbox. The potential interaction between monomers and hNav1.5 and hERG (two subtypes of ion channel protein) were predicted by AutoDock and verified by using whole cell patch clamp recordings. Intracellular calcium concentration of H9c2 myocardial cells were tested Fura2-AM fluorescence probe. Acute toxicity tests in mice were used to verify the potential cardiac risk in vivo through heart rate and representative cardiac enzyme profile. The results showed that 38 kinds of Tripterygium wilfordii components were screened by TCMSP, among them, 17 terpenoid monomer structures were acquired through PubChem database. 119 genes associated with disease and monomers were also obtained through various databases, and GO function analysis suggested that ion channels are probably target types of cardiac risk. The molecular docking results showed that 17 components could bind with hNav1.5 and hERG with different binding energy. Patch clamp results showed that mairin and wilforlide A could significantly inhibit the peak current of both hNav1.5and hERG and affect the dynamic property of both channels. Furthermore, mairin and wilforlide A could inhibit cell viability and increase intracellular calcium concentration of H9c2 myocardial cells, and mairin inhibited the heart rate ratio and increased the level of CK-MB. In conclusion, ion channel might be the potential cardiac risk target of Tripterygium wilfordii terpenoid, and mairin and wilforlide A might be main components of Tripterygium wilfordii causing cardiac risk.

DOI: DOI: 10.1016/j.cbi.2025.111627 | PMID: 40602703 [Indexed for MEDLINE]

25. **Severe kava withdrawal managed with phenobarbital** Am J Emerg Med. 2025 Jun 16:S0735-6757(25)00397-3. doi:10.1016/j.ajem.2025.06.016. Online ahead of print.
DOI: DOI: 10.1016/j.ajem.2025.06.016 | PMID: 40541460

Bleifuss W, Boley S, Bardwell J, Goebel C, Wilkinson J.

Piper methysticum, known as "kava", is a plant endemic to and historically consumed in the Pacific islands. The roots contain psychoactive kavalactones with sedating and anxiolytic effects. While often marketed for anxiety or as a safe alcohol alternative, dermopathy and more rarely hepatotoxicity are well described with heavy use. Reports of withdrawal are rare. The leaves of Mitragyna speciosa, also referred to as "kratom", contain psychoactive alkaloids with interactions at μ and δ-opioid receptors. Kratom is commonly used for its stimulant and opioid-like effects, for which dependence and withdrawal are much more well documented. A 45-year-old man presented to the emergency department (ED) with auditory and visual hallucinations, anxiety, insomnia,

and diffuse muscle jerking. He had been heavily using a supplemental beverage containing both kava and kratom, but stopped several days prior. His primary physician initiated buprenorphine therapy for suspected kratom withdrawal. Bedside evaluation in the ED was concerning for ongoing GABAergic withdrawal in the setting of kava use. Phenobarbital was given with significant improvement in symptoms, with eventual transition to diazepam. He was discharged home several days later in good condition. Given the increasing popularity of herbal supplements including kratom, and more uncommonly kava, clinicians should be aware of their potential for abuse, dependence and severe withdrawal syndromes. Kratom may be managed in a fashion analogous to that of an opioid. While kava's pharmacologic properties remain poorly understood, withdrawal may be severe enough to warrant hospitalization. Phenobarbital or benzodiazepines may be considered as a potential therapeutic approach.

26. **Derivation and internal validation of a clinical diagnostic score for acute poisoning involving aconite.** Clin Toxicol (Phila). 2025 Jul;63(7):476-487. doi: 10.1080/15563650.2025.2512818. Epub 2025 Jun 18.
DOI: DOI: 10.1080/15563650.2025.2512818 | PMID: 40528738 [Indexed for MEDLINE]

Lam RPK, Chua KK, Ku PY, Ting SC, Chow TK, Chan CK, Tse ML, Lau EHY, Rainer TH

INTRODUCTION: Aconitum spp. alkaloids, used in traditional Chinese medicine, are potent cardiotoxins and neurotoxins. Timely diagnosis of aconite poisoning remains challenging due to the long laboratory turnaround time. We aimed to derive and internally validate a diagnostic score for rapid recognition of acute Chinese medicine poisoning involving aconite using clinical parameters. METHODS: We conducted a retrospective cross-sectional study on consecutive patients with laboratory-confirmed Chinese medicine poisoning reported to the Hong Kong Poison Control Centre between 1 July 2008 and 30 June 2021. The reference standard was the diagnosis of acute aconite poisoning by a clinical toxicologist and laboratory detection of aconitine or related alkaloids in the patients' urine, serum, or gastric lavage specimens. Univariate analyses, followed by multivariable logistic regression, were performed to identify independent predictors of laboratory-confirmed aconite poisoning. A scoring system was developed based on the regression coefficients of the independent predictors and internally validated using bootstrapping. RESULTS: We identified 542 eligible episodes, of which 179 involved aconite and 363 involved other herbs. The median patient age of the included episodes was 55 years (range 4-98 years). A clinical diagnostic score was developed based on the six independent predictors: hypotension (systolic blood pressure <90 mmHg in adults or < age-appropriate ranges in children, 3 points), herbal decoction or wine formulation (2 points), facial or oral numbness (2 points), ventricular tachycardia (1 point), limb numbness (1 point), and premature atrial or ventricular contractions (1 point). The score ranges from 0 to 10, with a higher score indicating a higher likelihood of aconite poisoning. At the cutoff

point of ≥3, the sensitivity and negative predictive value of the score were 0.98 and 0.99, respectively. A higher specificity (0.92) and positive predictive value (0.84) could be achieved with a cutoff point at ≥4. The area under the receiver operating characteristic curve was 0.965 (95% CI: 0.950-0.980) during derivation and 0.965 (95% bias-corrected and accelerated CI: 0.947-0.977) during internal validation.
DISCUSSION: The newly derived Clinical Aconite Poisoning Score is simple to use, but its real-time discriminatory performance in diverse populations with Chinese medicine poisoning in real-world settings and its impacts on clinical management are unknown. CONCLUSIONS: In the context of Chinese medicine poisoning, the Clinical Aconite Poisoning Score might be useful in early recognition of aconite poisoning before laboratory confirmation. Future prospective studies are warranted to externally validate its real-time discriminatory performance in real-world settings before clinical adoption.

10.1097/MD.0000000000042567.
DOI: DOI: 10.1097/MD.0000000000042567 | PMID: 40441188 [Indexed for MEDLINE] | PMCID: PMC12129499

27. The effect of traditional Chinese medicine on renal function: A longitudinal cohort study with findings from 2011 to 2015 CHARLS.

Li W, Sun N, Gamber M, Chen M), Sun W

Current treatment methods for kidney disease are limited. Traditional Chinese Medicine (TCM) is proposed as an alternative therapy to treat those patients with kidney disease in China though the toxicities of TCM remain unclear. The estimated glomerular filtration rate (eGFR) is used to reflect kidney function and determine kidney disease stages. This study aims to examine the effect of TCM on eGFR among middle-aged Chinese. Data were drawn from 3 waves (2011-2015) of the China Health and Retirement Longitudinal Study for a secondary analysis involving Chinese adults aged 45 and older. TCM was categorized into 3 levels: never, moderate, and heavy use. Generalized linear mixed models were used to estimate the effect of TCM use on eGFR, adjusting for covariates and stratifying by baseline self-reported kidney disease. Among 5944 individuals, the proportions of never, moderate, and heavy TCM users were 63.1%, 26.0%, and 10.9%, respectively. Overall, TCM use was significantly associated with impaired renal function at baseline, and the association was consistent among those without kidney disease. Lower eGFR was associated with increased TCM usage (moderate: Beta: -0.77 [95% CI: -1.45, -0.10], and heavy: -0.84 [-1.79, 0.11]). eGFR decreased slower among heavy users compared to the never group (1.40 [0.36, 2.44]). TCM use is associated with impaired renal function among Chinese elderly. Further research is needed to better understand the mechanisms behind the complicated relationship between TCM use and renal function.

28. **Clinical effects of a Chinese herbal medicine on patients with chronic renal failure**

Afr J Reprod Health. 2025 May 16;29(5s):81-88. doi: 10.29063/ajrh2025/v29i5s.10.

Bu H, Shen X, Zou Y.

This study assessed the impact of experienced prescription by Chinese medical master Zou Yanqin on chronic renal failure (CRF) patients. One hundred and twenty CRF patients admitted in Affiliated Hospital of Nanjing University of Chinese Medicine from January 2021 to December 2022 were randomly separated into
a control group (CG) and a study group (SG). The CG accepted conventional therapy while the SG accepted treatment with Zou Yanqin prescription in addition to conventional treatment. The results showed that relative to CG, the SG had better total treatment effectiveness rate, lower serum creatinine as well as blood urea nitrogen levels, higher creatinine clearance rate, lower levels of inflammatory markers, higher serum albumin, hemoglobin and transferrin levels and lower incidence of adverse reactions. We conclude that experienced prescription by Chinese medical master Zou Yanqin can enhance the clinical treatment effect of conventional treatment, inhibit the inflammation, improve the nutritional status, and is safe for CRF patients.

DOI: DOI: 10.29063/ajrh2025/v29i5s.10 | PMID: 40391812 [Indexed for MEDLINE]

29. **Trends in Complementary and Alternative Medicine Adoption by Cancer Patients.**

Curr Drug Saf. 2025 May 6. doi: 10.2174/0115748863376819250416092622. Online ahead of print.

Mahmoudi L, Mahi-Birjand M, Jamalzadeh N, Niknam R, Karimzadeh

BACKGROUND: The use of Complementary and Alternative Medicine (CAM) in cancer patients is increasing. However, some patients are reluctant to disclose their use to their oncology treatment team. Often, the consumption of these products is not well studied, and little is known about their potential interactions with chemotherapy, radiation therapy, or biological methods, and their relationship to treatment outcomes. OBJECTIVE: In the present study, we examined the rate of supplement use in cancer patients treated with chemotherapy. METHOD: Patients who came to the University Cancer and Chemotherapy Center for treatment were asked to complete an anonymous questionnaire to assess their use of CAM.
RESULTS: Among 395 patients, 62.5% reported using at least one type of CAM after their cancer diagnosis. The primary reasons for CAM use among participants were managing chemotherapy-related toxicities, reducing anxiety, and sedation. Vitamin

and mineral use was reported by 72.4% of respondents, with vitamin D being the most popular (47.3% of respondents reporting use).
CONCLUSION: The use of CAM is common among many cancer patients. CAM products may interact with chemotherapy drugs, potentially affecting treatment outcomes. Therefore, it is very important to take an accurate history of these products in every chemotherapy session in order to assess the safety of CAM consumption. Further research is required to evaluate the impact of CAM use on the efficacyand safety of cancer treatments.

DOI: DOI: 10.2174/0115748863376819250416092622 | PMID: 40329732

30. **Impact of Ginkgo biloba drug interactions on bleeding risk and coagulation profiles: A comprehensive analysis.** PLoS One. 2025 Apr 8;20(4):e0321804. doi: 10.1371/journal.pone.0321804.

Mai NTQ, Hieu NV, Ngan TT, Van Anh T, Van Linh P, Thu Phuong NT

This retrospective observational study was conducted to investigate the prevalence and clinical implications of drug interactions involving Ginkgo biloba extract on bleeding risk and coagulation profiles. Our analysis utilized data from patients admitted to Hai Phong International Hospital between January 2022 and December 2023. Inclusion criteria consisted of patients aged 18 years and above, those prescribed Ginkgo biloba extract alone or in combination with other medications, and the availability of complete medical records, including medication history, laboratory tests, and clinical outcomes. Out of 2,647 prescriptions meeting the inclusion criteria, 342 exhibited drug interactions with a prevalence rate of 12.94%. Notably, Ginkgo biloba extract frequent interacts with antiplatelets, anticoagulants, and nonsteroidal anti-inflammatory drugs, with Clopidogrel and Aspirin exhibiting the highest prevalence rates of 2.61% each. However, interactions with anticoagulants including direct oral anticoagulants and acenocoumarol, were not statistically significant in our analysis. Omeprazole was a frequently interacting drug (2.34%) of mild severity. Among the 747 patients analyzed for bleeding disorders, 31 (4.15%) exhibited bleeding symptoms. Correlation analysis indicated a strong association between clinical bleeding and abnormal coagulation results (OR, 1.75; $p < 0.001$). Moreover, significant correlations were found between Ginkgo biloba extract drug interactions and the bleeding risk (OR: 1.08, $p < 0.001$) and abnormal coagulation (OR: 1.49, $p < 0.001$). The severity of Ginkgo biloba extract drug interactions did not correlate with bleeding risk (OR: 1.01, $p = 0.767$) but influenced abnormal coagulation test results (OR: 0.813, $p = 0.019$). Specific medications, including clopidogrel, aspirin, celecoxib, loxoprofen, nifedipine, and omeprazole, were significantly associated with the risk of bleeding and abnormal coagulation ($p < 0.05$). Interactions with ticagrelor, etoricoxib, insulin, omeprazole, and domperidone were associated with abnormal coagulation tests without affecting the reported bleeding. These findings underscore the critical need of evaluating potential

interactions involving Ginkgo biloba extract drug interactions in clinical pratice, particularly when assessing bleeding risk and managing coagulation.

DOI: DOI: 10.1371/journal.pone.0321804 | PMID: 40198642 [Indexed for MEDLINE] | PMCID: PMC11991284

31. **Changing perspectives: unveiling the risks of ashwagandha-induced hepatotoxicity.** Rev Esp Enferm Dig. 2025 May;117(5):288-289. doi: 10.17235/reed.2023.10080/2023.

    Casiano-Manzano S, Torres-Larrubia M, Masa-Caballero A, Jiménez-Colmenarez Z, Martín-Noguerol E, Fernández-Bermejo M, Solís-Muñoz P.

    Ashwagandha, an herb popular in Ayurvedic medicine, is renowned for its health-enhancing properties. However, its association with liver damage in recent years has raised significant concerns, necessitating careful assessment and management. This case underscores the dangers of Ashwagandha, particularly for individuals with preexisting liver conditions, where it can lead to life-threatening acute-on-chronic liver failure. The lack of solid clinical evidence supporting Ashwagandha's health claims emphasizes the need for an evidence-based approach. Public education is essential to raise awareness of the risks associated with herbal supplements and prevent liver diseases.

    DOI: DOI: 10.17235/reed.2023.10080/2023 | PMID: 37982556 [Indexed for MEDLINE]

Other Studies

32. **Presence and quantity of ingredients in sports supplements purportedly containing the orchid Eria jarensis**. Clin Toxicol (Phila). 2025 Jul 18:1-5. doi: 10.1080/15563650.2025.2515242.DOI: DOI: 10.1080/15563650.2025.2515242 | PMID: 40679500

    Cohen PA, Abarca R, Sovereign A, Gonzaga MJ, Gerona R.

    INTRODUCTION: The orchid Eria jarensis, purported to be a major source of N,N-dimethylphenethylamine, is promoted as a novel botanical ingredient in sport supplements.
    OBJECTIVE: To determine the presence and quantity of ingredients found in Eria jarensis sports supplements.
    METHODS: Supplements were purchased online in the United States, and each product was analyzed using liquid chromatography-quadrupole time-of-flight mass spectrometry.
    RESULTS: None of the 12 Eria jarensis supplements analyzed were accurately labeled. The products contained inaccurately labeled quantities of caffeine,

theobromine, hordenine, yohimbine, N,N-dimethylphenethylamine, and synephrine. Products that listed caffeine on the label contained quantities ranging from 0.1 to 665 mg/serving size. Nine of 12 products either listed an ingredient on the label that was not detected in the product or contained a stimulant not listed on the label. Four of 12 products contained an undeclared stimulant. In addition, two of these products contained the United States Food and Drug Administration-prohibited stimulant 1,4-dimethylamylamine.
DISCUSSION: The United States Food and Drug Administration does not evaluate the safety or quality of supplements prior to market introduction, and our findings reflect the consequences of this regulatory framework.
CONCLUSION: Sports supplements labeled as containing Eria jarensis that we tested were inaccurately labeled and contained high quantities of caffeine and undeclared stimulants.