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Arsenicum Album: From Toxic Element To Healing Potential - A Narrative Review

[1]Ram Jyothis A B,[2] Arun B Nair

[1]Professor and Head, [2]Assistant Professor

Department of Homoeopathic Pharmacy

Athurasramam NSS Homoeopathic Medical College, Kottayam, Kerala, India

Abstract: This review provides a comprehensive exploration of the Arsenicum album, a homoeopathic remedy derived from arsenic trioxide. It covers its historical significance, preparation methods, and therapeutic applications across various health conditions. The article discusses arsenic's pharmacological aspects, detailing acute and chronic toxicity while highlighting global health concerns due to arsenic-contaminated water. The medicinal use of arsenic, from ancient civilizations to modern cancer treatments, is outlined. Insights into its effects on plant and animal models showcase potential detoxification and therapeutic properties. Clinical research findings support its efficacy in treating diverse conditions, including COVID-19. The review emphasizes the need for ongoing research to fully understand its multifaceted nature.

Index Terms - Arsenicum album, Homoeopathic remedy, Therapeutic applications, Arsenic toxicity. Clinical research

1. Introduction

Arsenicum album (Ars alb) is a homoeopathic remedy derived from arsenic trioxide and holds a well-documented historical significance within homoeopathic literature. It was introduced into homoeopathic practice by Samuel Hahnemann, the founder of the homoeopathic system, and has demonstrated its efficacy since its early days of use[1]. Arsenicum album is known for its therapeutic potential in addressing a wide range of health conditions, including but not limited to food poisoning, gastrointestinal disorders, respiratory ailments, sleep disturbances, allergies, depression, anxiety, and obsessive-compulsive disorder. Furthermore, homoeopathic practitioners frequently prescribe Arsenicum album for a variety of complaints associated with symptoms such as fatigue, restlessness, anxiety, fear, weakness, septic infections, low vitality, and increased thirst[2]. Its preparation involves starting with the white oxide of metallic arsenic (As2O3), commonly referred to as arsenic trioxide.

The Homeopathic Pharmacopoeia of India outlines a specific procedure for preparing Arsenicum album from arsenic trioxide, involving a series of dilution and trituration steps. Initially, crude As2O3 is heated with glycerine and then mixed with diluted water and strong alcohol to create the mother solution. Subsequent potencies are achieved through a process of serial dilution using dispensing alcohol, combined with succussion (vigorous shaking) of the mother solution. Alternatively, this remedy can also be prepared by grinding fine As2O3 powder with the sugar of milk[3].

2. Acute effects of Arsenic in human beings.

In adults, the lethal dose of arsenic ranges from 100 to 300 mg. The daily safe exposure level for humans is approximately 0.6 mg/kg. The bioavailability of arsenic in humans ranges from 60% to 87%, and it is mainly eliminated through urine and bile. Methylation is generally considered the primary detoxification process for inorganic arsenic, and the trivalent form is more toxic than the pentavalent form[4]. Most ingested arsenic quickly enters the bloodstream via the gastrointestinal tract and lungs, primarily affecting the respiratory system. Once in the blood, 95-99% binds to haemoglobin's globin and spreads to organs like the lungs, liver, kidney, and skin. Ingested arsenic is eliminated faster due to liver biotransformation, with about 70% excreted through urine[5].

Acute arsenic poisoning initially causes symptoms like nausea, vomiting, abdominal pain, and diarrhoea, with severity depending on the dose. It can lead to a range of severe effects, including neurological symptoms, cardiovascular collapse, and even death. Arsenic induces oxidative stress, disrupts mitochondrial function, and inhibits key enzymes, compromising the body's ability to counteract free radicals and causing damage to cells and vital components[6].

3. Long-term effect of Arsenic in human beings

Prolonged exposure to inorganic arsenic can lead to cardiovascular issues like atherosclerosis, hypertension, ischemic heart diseases, and ventricular arrhythmias. Arsenite stimulates NADPH oxidase in vascular cells, increasing the production of Reactive Oxygen Species (ROS) like superoxides and hydrogen peroxide. These ROS combine with nitric oxide (NO) to form peroxynitrite, a potent oxidizing agent implicated in inflammation. Arsenite exposure also boosts the expression of atherosclerosis-related genes such as HO-1, MCP-1, and IL-6, promoting monocyte attachment, penetration, and migration in vascular smooth muscle cells (VSMC)7. Arsenic exposure is linked to a wide range of neurological complications in humans, including impaired memory, poor concentration, Parkinson's disease, Guillain-Barre-like neuropathy, verbal comprehension difficulties, encephalopathy, and peripheral neuropathy. The proposed mechanism for arsenic-induced neurotoxicity primarily involves oxidative stress, characterized by increased reactive oxygen species and lipid peroxides, along with a decrease in superoxide dismutase and reduced glutathione levels. Additionally, arsenic exposure has been reported to impact the metabolism of various neurotransmitters, including monoamines, acetylcholine, gamma-aminobutyric acid, and glutamate[8].Exposure to arsenic results in hepatotoxicity, which is evident through elevated levels of total bilirubin, alanine aminotransferase, aspartate aminotransferase, and malonaldehyde. Chronic exposure to arsenic triggers oxidative stress, leading to the activation of JNK and p38 MAPK pathways and causing apoptosis in liver cells. Additionally, arsenic-induced oxidative stress promotes hepatic apoptosis by increasing the expression of pro-apoptotic proteins[9]. Prolonged exposure to inorganic arsenic increases oxidative stress, leading to insulin resistance and dysfunction of islet beta cells through the overexpression of stress mediators like NF-κB, JNK/SAPK, and hexosamine. Trivalent arsenicals, including inorganic As (III), DMA (III), and MMA (III), inhibit Akt/protein kinase B phosphorylation by blocking PDK-1 activity, resulting in impaired insulin-dependent glucose uptake and hyperglycemia[10]. Arsenic-induced oxidative stress upregulates HO-1 and MAPK, which, in turn, activate transcription factors like AP-1, ATF-2, and Elk-1, leading to renal toxicity characterized by acute tubular necrosis and elevated blood urea nitrogen and creatinine levels [11]. Arsenic promotes cancer by activating cell signalling pathways, altering gene expression related to growth and malignancy, and inducing oxidative stress. It also triggers various signalling pathways impacting cell functions. Oxidative stress is the key driver of arsenic-induced cancer, which can be countered with antioxidants like vitamin E, melatonin, and curcumin. The carcinogenic effects of arsenic involve oxidative stress, gene damage, changes in growth factors, and disruptions in DNA repair mechanisms[12].

Chronic exposure to arsenic-contaminated water can result in various health issues. Arsenic triggers oxidative stress, inflammation, cardiovascular abnormalities, diabetes, neurotoxicity, kidney and liver damage, and potential carcinogenic effects.

4. Arsenic toxicity - a significant global concern.

The arsenic contamination incidents in Taiwan and Chile, serve as grim reminders of the severe health consequences associated with exposure to elevated levels of arsenic in drinking water[13,14]. This contamination led to chronic arsenic poisoning in a significant population, resulting in cases of hyperpigmentation, keratosis, Blackfoot disease (BFD), and various cancers. The contamination led to severe health issues in children, including Raynaud's syndrome, ischemia, and vascular problems. A significant number of school children exhibited cutaneous changes of arsenicism, with some experiencing systemic symptoms. Autopsies revealed arterial media hyperplasia. Skin pigmentation abnormalities and increased rates of bladder and lung cancer were also documented. In 1978, it was reported that approximately 6 million people living in 2,600 villages across 74 arsenic-affected blocks in West Bengal, India, were at risk of arsenic exposure. Shockingly, out of 86,000 individuals examined, 9.8% of people are suffering from arsenicosis, a debilitating condition caused by prolonged arsenic exposure[15].In North Mexico, an estimated 200,000 people experienced chronic arsenic exposure through their drinking water from 1963 to 1983. This contamination resulted in various health issues, including skin pigmentation changes, keratosis, skin cancer, peripheral vascular disease, gastrointestinal disturbances, and altered coporphyrin/uroporphyrin excretion ratios[16]. More than 20,000 cases of arsenicosis have been confirmed among the communities in China. Notably, deep well water in these areas also contained fluoride and arsenic, with fluorosis initially detected in the 1970s and arsenicism in 1980. Geological factors are considered responsible for the contamination. Clinical symptoms included skin conditions like keratosis, pigmentation changes, melanosis, or leucoderma, often accompanied by peripheral neuritis, gastroenteritis, hypertrophy of the liver, bronchitis, or cardiac infarction. In later stages, skin cancer and gangrene were also observed[17].

The documented cases of arsenic contamination in various regions around the world underscore the alarming and detrimental health effects associated with prolonged exposure to elevated levels of arsenic in drinking water. These cases serve as stark reminders of the critical importance of ongoing monitoring and mitigation efforts to prevent arsenic-related health crises in the future.

5. Arsenic as medicine - Historical perspectives

Medicinal use of arsenic dates to 2000 BC, when arsenic trioxide was employed as both a medicine and a poison. Ancient civilizations, including Greek, Roman, Chinese, and Indian, utilised arsenic compounds for various medical purposes. Prominent figures like Hippocrates, Galen, and Paracelsus incorporated arsenic into their medical practices, stressing the importance of proper dosage[18].In Ayurveda, a specific category of remedies known as Rasa Shastra involves the deliberate use of potentially toxic elements like arsenic. These elements are believed transformed into non-toxic forms, called bhasmas, through specific preparation techniques. In the 1880s, pharmacology texts documented their utilization in the form of pastes for treating skin and breast cancer[19]. In traditional Chinese medicine, arsenic was frequently employed for conditions such as tooth marrow disease, malaria, psoriasis, syphilis, and rheumatic ailments. In the early 1900s, medical practitioners were using arsenic to treat pellagra and malaria. It was in 1912, that arsenic was officially recognized as the most effective therapeutic agent in Pharmacopoeia[20]. Around the same time, Ehrlich's experiments led to the development of arsphenamine, and for nearly 40 years, arsenic remained the primary treatment for syphilis until the introduction of penicillin. During the 18th century, Fowler's solution, which consisted of 1% potassium arsenite, gained widespread popularity as a remedy for various health issues and continued to be in high demand for more than 150 years[21]. Arsenic became widely used in the treatment of vaginal discharge of diverse origins, available as vaginal inserts, or insufflation powder, demonstrating effectiveness against trichomonas. In the 1970s, scientists from Harbin University stumbled upon a valuable discovery regarding the therapeutic benefits of As2O3 as an active treatment for Acute promyelocytic leukaemia (APL). They observed that As2O3 can induce apoptosis and stimulate partial differentiation in APL cells This compound can be administered either through intravenous (i.v.) infusion or orally. Due to its remarkable effectiveness in treating APL, As2O3 has garnered interest for potential use in treating other types of cancers, including both relapsed and newly diagnosed patients[22]. Arsenic trioxide has proven effective in treating relapsed or refractory acute promyelocytic leukaemia (APL). This is particularly significant because a substantial percentage of APL patients experience relapses despite undergoing all-trans retinoic acid and combination chemotherapy[23]. A Chinese study reported complete clinical responses in a

good percentage of APL patients who had relapsed when treated with arsenic trioxide alone, without causing bone marrow suppression or significant side effects. Confirmatory results from U.S. clinical trials led to the FDA's approval of arsenic trioxide (Trisenox™) for this indication in September 2000[24].

Arsenic has a long and complex history in medicine, dating back thousands of years to its use in various cultures and traditions. It was employed both as a remedy and a poison in ancient civilizations. The journey of arsenic in medicine is a testament to its enduring significance and its potential for future therapeutic applications.

6. Arsenic as medicine - Modern perspectives

The success of arsenic trioxide in treating APL led to investigations into its application for other cancers. However, its significant toxicity has been a major hindrance. To mitigate this issue, scientists have developed biocompatible arsenic trioxide nanoparticles. These nanoparticles are created using chemical co-precipitation and coated with dimercaptosuccinic acid (DMSA) and chitosan, which enhances their stability and cytotoxicity when compared to the uncoated form. In laboratory studies, these coated nanoparticles induced alterations in cell morphology caused DNA damage, triggered caspase-dependent apoptosis, and upregulated the cyclin-dependent kinase inhibitor p21 through epigenetic changes in histone tails. These findings suggest that these nanoparticles may offer a safer and more effective approach to combating cancer[25]. Zhang and colleagues improved the release of arsenic III within micelles for enhanced efficacy against breast cancer cells. Modifying block polymer sequences reduced negative charge, increased stability, and improved inorganic arsenic release[26]. These nano formulations hold promise to address the challenge of non-selective cell damage in cancer treatment.

Arsenic trioxide, once a poison, now treats leukaemia and solid tumours, echoing Paracelsus's view that dosage distinguishes poison from a remedy. Delivering arsenic trioxide in nanoform offers a potential solution, pending confirmation through ongoing trials.

7. Effects of Homeopathic Arsenicum Album on Plant Models

Arsenicum album 45x potency produced distinct results in separate studies conducted by Italian and Swiss-German teams on arsenic-contaminated wheat. However, the outcomes differed significantly: the Italian team observed improved shoot length, germination rate, and reduced standard deviation, whereas the Swiss-German team reported decreased shoot length, germination rate, and increased standard deviation. This variation in results can be attributed to two main hypotheses. The first hypothesis links these differences to variations in seed quality, influenced by a range of cultivation factors such as climate, water supply, soil conditions, fertilization, plant health, insects, and harvest timing. The second hypothesis is rooted in observed patterns in high-dilution models, where potency levels unpredictably alternate between effective and ineffective outcomes[27].The utilization of the homoeopathically prepared Arsenicum album resulted in an enhanced growth rate of arsenic-affected duckweed. This outcome could be construed as indicative of a potential detoxification or restoration effect within the system. When the potentised Arsenicum album was administered, notable effects were observed, surpassing the effects seen in the water control group in terms of the measured outcome parameters[28].In a blinded, randomized experiment using tobacco leaf disks, homoeopathically prepared arsenic trioxide (As2O3) treatments were studied for their impact on tobacco plants exposed to tobacco mosaic virus (TMV) as biotic stress. The results indicated that decimal potencies of arsenic influenced both plant resistance and response variability. In contrast, centesimal potencies primarily affected response variability, suggesting a higher level of complexity. This suggests that a unique effect of homoeopathy is reducing system variability, although it doesn't exclude the possibility of an oscillatory effect within individual organisms due to the treatment[29].A study investigated the effects of homoeopathic remedies Sulphur and Arsenicum album on mint plants' growth and essential oil content. Both drugs were tested at various dilutions (6CH, 12CH, 24CH, and 30CH), with water as a control, and applied weekly for 98 days in a greenhouse. Sulphur exhibited a more pronounced impact on increasing fresh and dry biomass, while Arsenicum album increased fresh biomass in 24CH and 30CH dilutions. Both drugs elevated plant height. These results suggest that Sulphur and Arsenicum album can modify plant metabolism, particularly by boosting secondary metabolism and increasing essential oil production[30].The application of

potentized homoeopathic remedies, Arsenic album and Baryta carbonica, stimulated seed germination significantly compared to distilled water (control). Both remedies enhanced germination rates, with minimal variation between different potencies, although a notably strong effect was seen at the highest potency (202CH). Furthermore, the use of these homoeopathic remedies led to a gradual increase in plant growth, resulting in remarkable improvements in various morphological aspects, including a substantial increase in shoot length, surpassing the control group[31].

To gain a deeper insight into the impact of the highly diluted Arsenicum album on plants, we could pursue more sophisticated research. This could entail employing diverse techniques for assessing plant growth or applying parameters that closely mimic the plant's physiological and biochemical Impact of the Homeopathic Arsenicum album on Animal Models.

8. Impact of Homeopathic Arsenicum Album on Animal Models

In a research study, exploring the effects of homoeopathic preparations of Eupatorium perfoliatum and Arsenicum album on parasite multiplication in a rodent malaria model, Eupatorium perfoliatum at 30 CH demonstrated a significant 60% inhibition of parasite growth. Conversely, Arsenicum album 0/6 showed a 70% inhibition, but it was less reliable than Eupatorium perfoliatum[32]. It was also observed that Arsenicum album-200 significantly reduced chronic arsenic toxicity in mice induced by repeated injections of Arsenic trioxide, as evidenced by statistically significant reductions in toxicity levels across various parameters compared to control groups[33]. In another promising study, assessing the comparative efficacy of Arsenicum Album 30C and 200C, administered before and after Arsenic trioxide injection in mice, genotoxic effects were measured through various parameters. Chromosome aberrations (CA), micronucleated erythrocytes (MNE), and sperm head anomalies (SHA) were reduced in Arsenicum Album-fed groups compared to controls, while the mitotic index (MI) showed an increase. Notably, the combined pre- and post-administration of Arsenicum Album was the most effective in mitigating the genotoxic effects of Arsenic trioxide, with the 200C potency proving superior to the 30C potency, demonstrating Arsenicum Album's ability to counteract the genotoxic effects of arsenic poisoning[34]. Canova, a homoeopathic formulation containing high dilutions of Arsenicum album, demonstrated significant benefits in sarcoma 180-bearing mice. It resulted in delayed tumour growth, reduced tumour size, increased lymphoid cell infiltration, and improved tissue changes around tumours compared to the control group. All treated animals survived, whereas 30% of the control group did not. Furthermore, 30% of treated animals achieved complete tumour regression, and active treatment boosted leukocyte and lymphocyte counts, suggesting an enhanced immune response against experimental sarcoma[35]. It was found that. in basic research, highly potentized Arsenicum album is used most often (101 experiments), followed by Sulphur (65 experiments), Thuja (48 experiments), Phosphorus (42 experiments), and Cuprum sulphuricum (41 experiments)[36]. Arsenicum album homoeopathic dilutions exhibited the ability to reduce oxidative stress in LPS-induced inflammation within microglial cells, while the control vehicle had no such effect[37].

The research presented in these studies highlights the potential therapeutic effects of homoeopathic preparations of Arsenicum album and these findings suggest that further research into the efficacy and mechanisms of action of homoeopathic remedies is warranted.

9. Unveiling the Healing Potential: Arsenicum Album in Clinical Research

A retrospective assessment of the outcomes associated with homoeopathic treatment for 62 patients afflicted by bronchial asthma exhibited a substantial and statistically significant improvement in their condition. Among the various homoeopathic remedies examined for their efficacy in mitigating the frequency and severity of bronchial asthma attacks, the Arsenicum album emerged as the most prominent in its effectiveness[38]. In a comparative analysis of research findings from studies conducted in Nepal and Nicaragua aimed at reducing the duration of diarrhoea and the frequency of stools in children suffering from acute childhood diarrhoea, it was observed that certain homoeopathic remedies were frequently administered. In Nepal, the most utilized remedies were Podophyllum, Sulphur, and Arsenicum album, comprising 77% of the cases. These five remedies collectively accounted for 85% of cases in Nepal and 73% in Nicaragua[39]. In a

research study conducted in arsenic-contaminated villages in West Bengal, India, it was observed that elevated antinuclear antibody (ANA) levels in the population could be normalized by administering the potentized homoeopathic remedy Arsenicum album. These findings suggest that Arsenicum album holds significant promise for mitigating elevated ANA levels and other haematological toxicities induced by arsenic exposure[40]. Arsenicum album is found to produce different symptoms in healthy volunteers when compared to a placebo. Participants who took the Arsenicum album experienced specific symptoms of it, while those in the placebo group reported non-specific symptoms. These differences in symptoms were statistically significant, indicating that homoeopathic preparations had an observable effect distinct from placebo in this experiment[41]. A double-blind clinical trial assessed the efficacy of Arsenicum album in treating Oral lichen planus (OLP) in ninety-four participants over six weeks. While there was no significant overall difference in symptom relief between the homoeopathic remedy and placebo groups, individuals deemed good candidates for the Arsenicum album did show a suggestive but statistically insignificant difference in treatment response[42]. Arsenicum album potencies were found to be effective in the management of Diabetes mellitus and Diabetes Peripheral Neuropathy (DPN)[43,44]. In a multi-centric data collection survey during the 2009 Avian H1N1 influenza pandemic in India, 89 distinct combinations of swine flu symptoms were recorded. Initial appointments involved the use of 44 different remedies or combinations, with Arsenicum album being the most frequently prescribed in 99 follow-up appointments with valid swine flu symptoms, Arsenicum album continued to be the predominant choice, representing 28.0% of prescriptions[45]. Arsenicum album is also found to be effective in the treatment of amoebic dysentery[46]. Arsenicum album was the most frequently recommended and beneficial medication for managing acute tracheobronchitis[47]. This result was consistent with other studies that had also identified Arsenicum album as a commonly prescribed remedy for acute respiratory allergies[48]. Arsenicum album administered in centesimal and LM potencies effectively resolved the case of a hospitalized patient suffering from diabetic foot ulcer, pyrexia, and leukocytosis[49].

10. Arsenicum album: Exploring its prophylactic and curative potential during the COVID-19 Pandemic

Homeopathic treatments that have worked in previous epidemics follow a method called 'genus epidemicus.' This method involves finding the right preventive medicines by carefully observing many cases. In the absence of established COVID-19 treatments or vaccines, the Ministry of Ayush advised Arsenicum album 30 C as a prophylactic, chosen for its alignment with clinical features of COVID-19 and successful use in Influenza-like illnesses (ILI) [50,51,52]. There have been questions raised about the advisory issued by the Ministry of AYUSH, Government of India, regarding Arsenicum album 30. It is important to clarify that this advisory should not be misconstrued as a formal endorsement; rather, it was presented as guidance. Currently, the Clinical Trial Registry of India features 29 registered clinical trials, all centred around the examination of repurposing homoeopathic medications for the prevention or treatment of COVID-19. Among these therapeutic agents, the Arsenicum album stands out as the subject of the most extensive research scrutiny[52]. The Central Council for Research in Homoeopathy (CCRH) conducted a retrospective analysis of a diverse population cohort to examine COVID-19 incidence. It revealed a statistically significant reduction in the risk of contracting COVID-19 among high-risk demographics following prophylactic treatment. These findings suggest that Arsenicum album 30C may hold promise as a prophylactic measure against COVID-19[53]. In a study evaluated the protective effect against COVID-19 in a cohort study involving 10,180 individuals from Delhi's containment areas, Arsenicum album 30 showed an 83.43% overall protective effect and a 74.40% protective effect against lab-confirmed COVID-19[54]. A group of homoeopaths in Catalonia, Spain, studied 107 COVID-19 patients with mild or moderate symptoms and treated them with homoeopathic remedies including Arsenicum album 200 with faster recovery. This study helped to suggest homoeopathic treatments might work best for mild and moderate COVID-19[55].In a retrospective cohort study of 1,642 employees in São Paulo, Brazil, from April to July 2020, Arsenicum album 30 intervention was administered. Notably, the incidence of COVID-19 was significantly lower among employees who received the intervention compared to those not receiving it[56]. In a cross-sectional analysis of data from the Ayush Sanjivani app (May 4 - July 31, 2020), most respondents favoured Ayurveda and homoeopathy, likely due to their widespread availability in Indian healthcare. The public commonly used Arsenicum Album 30C (for respiratory issues) and two Ayurvedic formulas, Samshamani Vati and Ayush-64, for conditions like fever,

flu-like symptoms, cough, and breathlessness[57].In the Cuban National Protocol for COVID-19, PrevengHo®-Vir, a homoeopathic combination remedy that contains Arsenicum album, has been integrated as a prophylactic for COVID-19[58]. A randomised, single-blinded, placebo-controlled study revealed that the Arsenicum album was one of the most recommended medications[59]. This aligns with the observations made by Italian physicians, even though their investigation lacked a systematic approach. Michael et al. also reported similar findings regarding effective remedies[60,61].

A non-randomized, single-arm, open-label observational trial was conducted in Delhi, between September and December 2020, in 185 laboratory-confirmed mild COVID-19 cases. The primary research outcome was the number of days to complete symptom resolution and assessment of symptom severity. The study found that 90% of patients completed the 14-day follow-up, with a median symptom resolution time of 4 days with Arsenicum album and Bryonia as prominent medicines[62]. A study involving 367 COVID-19 patients with classical homoeopathic treatment, resulted in improvement for over 73% of cases, the most frequently prescribed remedy was Arsenicum album[63]. In retrospective observational research conducted at the Hahnemannian George Galvão Institute in São Paulo, Brazil, examining the medical records of symptomatic COVID-19 patients who received homoeopathic treatment, the most prescribed homoeopathic remedies were Antimonium tartaricum in 2020 and Arsenicum album in 2021[64].

Therefore, Arsenicum album exhibited prophylactic and treatment options for COVID-19, especially in mild and moderate cases. While the Ministry of Ayush and various studies offer guidance and encouraging results, efficacy must be established through further research and rigorous clinical trials.

11. Conclusion

In conclusion, this comprehensive review provides a comprehensive overview of the acute and chronic effects of arsenic in human beings, its historical and modern applications in medicine, its impact on plant and animal models, and its potential therapeutic roles in various clinical scenarios. The findings underscore the intricate interplay between arsenic and human health, highlighting the urgent need for further research and rigorous clinical trials to elucidate its efficacy definitively. This review emphasises the multifaceted nature of arsenic, from being a toxic element to a potential healing agent, offering valuable insights for future investigations and medical applications. In a realm where personalized and holistic approaches to healing gain prominence, Arsenicum album stands as a testament to the enduring relevance and efficacy of homoeopathy. Its journey from ancient practices to modern research underscores its pivotal role in promoting well-being through gentle, individualized, and profound healing mechanisms.

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