

Critique aa and interact with dna directly. there

[Parts of the World, Asia](#)



Critique Article Jordan Brewer November 28th, 2017 Indiana University East
The article I will be critiquing is called Aristolochic acids and their derivatives are widely implicated in liver cancers in Taiwan and throughout Asia. The article had many contributions from a variety of different authors and has an impact factor of 37.205 in 2016.

This article looks to find evidence on whether or not the exposure of Aristolochic acids (AA) would decrease, following the ban in Taiwan for herbal remedies containing the AA signature. Although the evidence of a decrease in the AA signature was not the result. Turns out that the exposure to AA had stayed about the same. Why would this be? Well the authors to the article had a few ideas for this. One reason being the fact that many of these AA containing herbal remedies were continued to be used by many even following the ban. There were also reports that Chinese medical practitioners continued to prescribe their patients with some of these AA containing herbal remedies during the first year the ban took place. It is apparent that plants containing high dosages of AA are widely available for purchase online and often are mislabeled. But Aristolochic acids aren't the only concern.

There is also aristolactams. There isn't too much research on them but are thought to be mutagenic metabolites of AA and interact with DNA directly. There is also evidence that supports the theory that the signatures being observed is caused by AA, or possibly even with the help of other related/unrelated compounds. Studies conducted on animals have shown evidence that AA adducts along with AA mutagenesis occur within the liver.

The exposure of AA in Taiwan was more prevalent compared to other areas. Aristocholonic acids were also found in certain groups of Asian countries. This goes to show the prevalence of AA and how they are spread throughout different areas of the world. The author encourages opportunities for primary and secondary prevention when it comes to regulating such AA containing plants.

Although China and Taiwan only choose to regulate specific plants containing AA. It is also interesting to note that the sale of AA containing plants is not prohibited within the United States even though evidence shows that it is dangerous. Although the herbs must be correctly labeled and not detailing any health benefits from ingesting such a substance. What does this mean? AA containing plants can easily be bought online and accessed in numerous other ways. The author hopes to discourage the use of these AA containing plants by providing evidence of its harmfulness.

Also, that labeling of these herbs tends to get pretty difficult for suppliers to know exactly which multi-herb substances contain AA. The author offers a suggestion for more thorough measures to be taken to identify herbal products in an attempt for primary prevention. The author also offers a suggestion for secondary prevention, for those who have already resulted in exposure to AA, this would be in the form of advanced screenings that would be able to detect AA-associated cancers. Overall, I would say that the article has succeeded in providing public awareness on the seriousness of Aristocholonic acids and how dangerous they can be. The author's writing style was clear and concise, while also being easy to follow.

I like the authors ideas when it comes to primary and secondary prevention. The regulation of AA containing plants is lacking in many countries, including our own. Meaning that until there is some type of regulations put in place for these AA containing plants, one can only spread the word until there is something done about it.

Based on the evidence provided within this study, I'm curious to why these plants have not been banned completely in all areas of the world. Out of everything I read within the article I was particularly intrigued on the lack of a decrease in exposure of the AA signature following the ban in Taiwan back in 2003. It seems to me that many people continued to use these AA containing herbs even following the ban. I am curious to why somebody would continue to use something that you knew would potentially cause liver cancer. But access to such plants are still widely available. Perhaps the lack of regulation is the reason to blame for the continued use of such plants. It seems to me that they understand the potential dangers that come along with the plants, but the countries refuse to completely do away with them. It may be more time consuming to try to regulate these types of herbs when it comes to mixed varieties, but it is essential to prevent exposure to such plants.

I believe that this article is important for providing evidence to support the connection between the AA signature mutation found with some herbs and liver cancer. I enjoyed reading this article and thought that it provided valuable information on the prevalence along with the dangers of AA related herbs. References Ng, A.

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