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Aristolochic acids in herbal medicine: Public health concerns for consumption and poor regulation of botanical products in Nigeria and West Africa

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Biography

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Aristolochic acids are naturally occurring biomolecules found in plants of the genus *Aristolochia* and *Asarum* belonging to the family Aristolochiaceae. They are reported to be carcinogenic and nephrotoxic; and are implicated in kidney diseases, aristolochic acid nephropathy (AAN) which may result in kidney failure, other health complications and possibly death. Aristolochic acids are highly genotoxic and are linked to upper urothelial cancer in animals and humans. Some *Aristolochia* species are used in traditional medicine practice in Nigeria and other West African countries without regard to safety concerns. Several countries, especially in the Western world, have banned the use and importation of herbal products containing aristolochic acids. There is need for warning and strict regulation on the importation and consumption of aristolochic acids-containing botanical products in Nigeria. This work aims to review the availability of aristolochic acids, their toxicity, circulation, as well as the quantitative analytical techniques and regulations. It analyzed the herbal products containing aristolochic acids, and aristolochaceae plants grown in Nigeria in respect to public health implications. It highlights the importance of doing an extensive study on indigenous plants producing aristolochic acids and imported herbal products used as weight loss supplements marketed in Nigeria. There is need to emphasize proper labeling of herbal products containing aristolochic acid.

Figure 1. Some naturally occurring aristolochic acids in Aristolochia species

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