

## Nephrologists 2020: Nephrotoxicity of *Dysphania ambrosioides*

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### Introduction:

*Dysphania ambrosioides* or pigweed called in Morocco m'khinza is a plant that belongs to the family of "Chenopodiaceae" used as an anthelmintic, antispasmodic, carminative and antipyretic. However, it can have a toxic effect especially on the kidney. Nephrotoxicity is one of the most well-known kidney issues and happens when your body is presented to a medication or poison that makes harm your kidneys. At the point when kidney harm happens, you can't free your assemblage of abundance pee, and squanders. Your blood electrolytes, (for example, potassium, and magnesium) will all get raised. Nephrotoxicity can be brief with a transitory height of lab esteems (BUN as well as creatinine). On the off chance that these levels are raised, these might be because of an impermanent condition, for example, parchedness or you might be creating renal (kidney disappointment). On the off chance that the reason for the expanded BUN as well as creatinine levels is resolved early, and your human services supplier executes the fitting mediation, lasting kidney issues might be evaded. Nephrotoxicity is characterizing as fast decay in the kidney work because of harmful impact of drugs and synthetic substances. There are different structures, and a few medications may influence renal capacity in more than one way. Nephrotoxins are substances showing nephrotoxicity. Nephrotoxicity ought not be mistaken for the way that a few prescriptions have an overwhelmingly renal discharge and need their portion balanced for the diminished renal capacity (e.g., heparin). The nephrotoxic impact of most medications is increasingly significant in patients previously experiencing kidney disappointment. About 20% of nephrotoxicity is instigated and brought about by drugs; this rate is enlarged in the old because of an expansion in the life expectancy and polymeds. Nephrotoxicity or renal harmfulness can be a consequence of hemodynamic changes, direct injury to cells and tissue, incendiary tissue injury, as well as block of renal discharge. Nephrotoxicity is every now and again initiated by a wide range of restorative medications and ecological toxins. Information on the complex sub-atomic and pathophysiologic systems prompting nephrotoxicity stays restricted, to some extent, by research that generally centered around single or moderately scarcely any hazard markers. All things considered, current kidney injury biomarkers are deficient as far as affectability and explicitness. Conversely, metabolomics empowers screening of an immense range of metabolites at the same time utilizing NMR and MS to evaluate their job in nephrotoxicity advancement and movement. A progressively far reaching comprehension of these biochemical pathways would likewise give significant understanding to malady instruments basic for tranquilize advancement and treatment.

### Methods:

We report two cases of poisoning to *dysphania ambrosioides* plant collected in department of nephrology hemodialysis Casablanca

### Patients and Results:

These KY aged 16, without specific medical history, admitted to the nephrology department for kidney failure at 64 mg / L of creatinine occurred after concomitant m'khinza and phenicols for ten days for suspected typhoid fever . On examination, the patient was afebrile, with normal tended to 130/70 mm Hg, the presence of a protein cross with urine strips without traces of blood, urine output is maintained to 2100 ml. The tests showed an acute renal failure to 64 mg / L of creatinine, 24-hour proteinuria 1.39 g / 24 hours without impact on the protidogramme, sterile urine cultures with leukocyturia 200 000th / ml. The patient underwent renal biopsy which showed Nephritis tubulointerstitial acute. It is HE aged 23, without specific medical history, admitted to the nephrology department for kidney failure at 80 mg / L of plasma creatinine occurred after taking m'khinza for a week for a fever. On examination, the patient was afebrile, with normal tension to 120/70 mm Hg, urine output is maintained to 2L with the dipstick two cross of blood without hematuria. The tests showed an acute renal failure to 80 mg / L of creatinine, 24-hour proteinuria at 2 g / 24 hours without impact on the protidogramme, sterile urine cultures with leukocyturia 120 000th / ml. The patient received a kidney biopsy which showed Nephritis tubulointerstitial acute.

**Discussion:** Despite advances in pharmacology, therapeutic use of plant is very present in some countries of the world especially those developing. In the literature, data about poisoning pigweed are few and documented. Use for food, cosmetic or curative of certain plants potentially toxic, or at least a portion (seed, stem, etc.), can induce severe poisoning or death. These poisonings are a frequent accident in most regions. Some cases of brain or renal toxicity of this active ingredient have been reported in the literature.

### Conclusion:

The combination of histological lesions and m'khinza gain in this patient did mention its toxic effect on the kidney that is a limitation to the use of this plant despite its analgesic qualities, antispasmodic, and anthelmintic.