

## Nephrotoxicity induced by herbal medicines used in D R Congo

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**Background:** Herbal medicines (HMs) are popular in many African countries and is now considered as an alternative medicine in low income countries (1). Adverse drug reactions with central African herbal medicine aren't yet well documented and patient ignore the risk of their use. During past years, serious and severe nephrotoxicities were observed in our university hospital. In the aim to establish a causality with the use of herbal, a cohort study were performed.

**Objectives:** To identify herbal medicines concerned and to evaluate the kidney damage induced.

**Methods:** A cohort study was conducted in the Unit of Nephrology at the University Hospital between 2004 and 2009. Kidney injury was confirmed with creatinine elevated or with an acute oligo - anuria. Causality assessment was made by French Methods.

**Results:** 1016 patients were admitted at the Nephrology Unit of University Hospital. During this period, 393 cases of acute kidney impairment were observed in which 201 cases of nephrotoxicity, 154 (39.2 %) was attributed to herbal medicines. Herbal medicines were used for different purposes.

HMs involved are: Iridaceae gladiolus (25 %), Tetradenia ripana (14 %), Quassia Africana (13 %), Zingiber officinalis\* (8 %), Pentadiplandra brazzeana Baill, Alchornea cordifolia Muell. Arg, Morinda morindoides, Ocimum americanum LINN, Hymenocardia ulmoides OLIV, Annona senegalensis PERS, Nauclea latifolia SMITH, Moringa oleifera. Some Foreign HMs as Aristolochia triangularis, Clematis chinensis, Aloe vera and Xin yi wan were also found in this cohort.

**Conclusion:** Nephrotoxicity is one of the serious adverse reaction and could be encountered with plant commonly used in popular medicine in DR Congo the frequency of nephrotoxicity induced by HMs in our study is quite similar to those reported by other studies. Many studies have previously reported nephrotoxicity with some foreign herbals found in this study as Aloe vera, Aristolochia triangularis, Clematis chinensis and Xin yi wan. The Question is to determine if the effect observed is also due to aristolochic acid as reported in the literature. Therefore, it is necessary to monitor HM ADRs, to make available relevant data, to awake population consciousness and to discard from the market those with poor safety

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