



NEPHROTOXICITY INDUCED BY HERBAL MEDICINES USED IN DRCONGO



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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. However, adverse drug reactions(ADRs) with central African herbal medicines are not well documented yet so that patient ignore the risk of their use.

OBJECTIVES

- to identify herbal medicines concerned
- to establish a causality with the use of herbal
- and to evaluate the kidney damage induced.

METHODS

A retrospective cohort study of 1016 consecutive patients was carried out in the Unit of Nephrology of the University Clinic of Kinshasa between 2004 and 2009. Kidney injury was confirmed with creatinine elevated or an acute oligo - anuria. Causality assessment was made by French Method (1).

RESULTS

Among 1016 patients admitted during this period, 393 cases of acute kidney injury were observed in which 201 cases of nephrotoxicity. 154 (39.2 %) of them were attributed to herbal medicines, and were used for different purposes. According to the French criteria of imputability, a causal correlation between acute kidney injury and the administration of HMs was highly likely in 76%.

HMs involved were: *Iridacee gladiolus* (25 %), *Tetradenia riparia* (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*, *Nuclea latifolia SMITH*, *Moringa oleifera*. Some Foreign HMs as *Aristolochia triangularis*, *Clematis chinensis*, *Aloe vera* and *Xin yi wan* were found as well.

DISCUSSION AND CONCLUSION

Nephrotoxicity is one of the serious ADR 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 (2).

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* (3). Therefore, it is necessary to HM adverse réactions, to make available relevant data, to increase awareness of population and to discard from the market those with poor safety.

References

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Congolese herbals medicines

- *Iridacee gladiolus*
- *Tetradenia ripana*
- *Quassia Africana*
- *Zingiber officinalis**
- *Ocimum americanum LINN*
- *Pentadiplandra brazzeana Baill*
- *Alchornea cordifolia Muell.Arg*
- *Morinda morindoides*
- *Hymenocardia ulmoides Oliv*
- *Annona senegalensis PERS*
- *Nuclea latifolia SMITH*
- *Moringa oleifera*

