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Short Communication

Cutaneous side effects of traditional medicinal plants in Dakar/Senegal

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Abstract

Introduction: Despite their frequency especially in Africa, cutaneous side effects linked to traditional herbal medicine are much less known than those conventional drugs. **Objective:** To determine epidemiological, clinical and allergological aspects of cutaneous side effects due to traditional medicinal plants in Dakar. **Materials and methods:** All patients with skin reaction linked to exclusive use of traditional medicinal plants were prospectively evaluated in the Department of Dermatology of the Institute of Social Hygiene of Dakar from May 1st, 2016 to June 1st, 2017. Patch tests were done in some patients with recovered plants, transformed into macerates and powders and mixed with Vaseline at concentrations of 5, 20 and 30%. Products reported as solutions were directly tested. The statistical data were analyzed thanks to the software Stata 14. The chi-square test was used for the analytical study with a threshold of significance for $p < 0.05$. **Results:** Fifty-three (53) patients were included. Their average age was 46, 5 years with sex ratio to 0, 88. Forty seven percent (47%) of them were uneducated and 16% had a basic level of education. The socio-economic level was considered low in 72%. Personal and/or familial atopy was reported in 73% of cases. The cutaneous adverse effects were: systemic eczema (n=22), contact eczema (n=4), erythrodermic syndrome (n=4), fixed drug eruption (n=3), lichenoid rash (n=3), Steven Johnson syndrome (n=3) and 1 case each of erythema multiforme, acute generalized exanthematous pustulosis, prurigo, urticaria and phytophotodermatitis. Worsening of skin diseases was found in 9 patients. Average time of onset after taking the plants was 12 days. The main responsible plants were *Detarium microcarpum* (n=10), *Momordica charantia* (n=9) and *Jatropha chevalieri* (n=7). Patch tests were positive in 11 patients out of the 31 who benefited corresponding to a frequency of 35,48%. However, there was no statistically significant association between the positive result of patch test and the nature of the skin reaction ($p=0,388$) or the type of plants used ($p=0,402$). **Conclusion:** Cutaneous side effects of traditional medicinal plants occur most often in atopic people, who are dominated by systemic eczema with a possibility of severe reactions. Significant positivity of patch tests indicates their interest in exploring these reactions, which could contribute to a better approach of accountability.

Biography

Brahima Seck is a member of the History department of University Cheikh Anta Diop of Dakar (UCAD), Senegal. His research is mostly devoted to the historical and cultural links between West Africa and Louisiana with a special interest for religious beliefs, music, foodways, and miscellaneous aspects of culture. Dr. Seck is now holding the position of Director of research of the Whitney Plantation Slavery Museum located in St. John the Baptist Parish in Louisiana

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