Long Term Ketoconazole and Eumycetoma; a Complicated Drug for a Mysterious disease

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Mycetoma is a chronic granulomatous infection of the subcutaneous tissue caused by true fungi or higher bacteria; hence, it is classified as Eumycetoma or actinomycetoma, respectively. It is endemic in (sub) tropical areas, and the Sudan seems to be the mycetoma homeland, with hundreds of new patients attending specialized clinics each year. Mycetoma pathogens such as the fungus Madurella mycetomatis can be found in certain types of soil or as colonizers of plants and show widespread environmental distribution. M. mycetomatis is the main cause of Eumycetoma, being responsible for approximately 70% of all mycetoma cases in Sudan (1,2). Ketoconazole drug have been proven to be effective in treatment of Eumycetoma but with challenging side effects and adverse reactions that need to be closely studied. (2)

This cross sectional, descriptive hospital based study has included 280 patients with confirmed eumycetoma on ketoconazole treatment. All of them were interviewed thoroughly regarding the use and complications of Ketoconazole using pre-designed questionnaire. Most of the patients were males and patients age ranged between 10 years and 65 years with a mean age of 29 years. The mean treatment duration was 32 weeks and range between 3 and 150 weeks. The majority of patients (38%) developed side effects after 12 weeks of using the ketoconazole. The commonest Ketoconazole side effects encountered in this study were skin hyperpigmentation, lip dryness and ulceration, nausea, vomiting, less frequent gynaecomastia, impotence, menstrual disturbances, fever, sweats and abnormalities of liver enzymes. Poor drug compliance was documented in 23% of the patients and that was due to the treatment non-affordability, drug side effects and the long treatment duration and 29% of the patients were unsatisfied with the drug.

In conclusion, Ketoconazole proved to be a drug with many side effects and hence many patients were unsatisfied with the treatment. The patients requires close clinical and biochemical follow up to monitor the drug side effects. There is a need for safer, potent and effective treatment for eumycetoma.
