

Asthma at Muhimbili: a clinical and laboratory study of pattern of presentation, provoking and aggravating agents, and complicating factors.

Kilonzo, Gad P.

The purpose of this study was to examine asthma patients presenting at Muhimbili Hospital with the view to: 1. Describe social and psychological features associated with asthma patient presenting at Muhimbili. 2. Describe the pattern of the disease here and compare this with that described in other parts of the world, with particular emphasis on atopic disease. 3. Find out what agents provoke and influence severity of illness. 4. Determine the clinical status of these patients 5. Find out what complications accompany the disease with special attention paid to the cardiopulmonary system. 50 asthma patients and a group of 44 non-asthmatic control patients presenting at Muhimbili were studied. Asthma patients referred to Muhimbili casualty department and those admitted through medical outpatient clinics during September, October and November 1976 were included. Cases were taken consecutively as far as possible. They were interviewed, examined and investigated. The methods included (i) Personal interview with the patient using a check list. (ii) General physical examination with emphasis placed on cardio-respiratory system, and in particular noting signs of chronic chest hyper-inflammation due to chronic airway obstruction. (iii) Investigations were done to asthmatic patients. Only those investigations which required to be controlled were done to control patients, mainly stool examination, and serum estimation for IgE. The results showed late onset of asthma more marked among the females with crippling social and psychological stresses which accompany the disease. Accompanying a topic illness high resembled the picture seen in temperate countries, and unlike that reported in several tropical countries. History was not a good indicator of offending allergens, and skin testing is suggested as a better method of identifying sensitizing allergens. Asthma in Muhimbili resembled other tropical countries in having a high eosinophil count, but this count was not higher than that of control patients. Asthma patients also have lower intestinal parasite load than a group of control patients. Patients with severe asthma have significant dehydration at the time of hospital admission. Chest radiographic changes were similar to the observations of other clinical workers in tropical countries and consisted of signs of chronic hyperinflation and tuberculosis reactivation. Results of skin testing identified two major allergens, house dust mites and mixed threshings. House dust mites and their secretions in dust were more important. Implications for management and therapy include the following: (a) Severe asthma patients should be rehydrated with at least 2 litres of fluid. This may be given as a vehicle for bronchodilators. (b) Asthma patients on corticosteroids whether continuous or intermittent should receive prophylactic anti-tuberculous therapy or followed closely with chest radiographs and sputum culture. (c) On the basis of sensitivity pattern tetracycline is the drug of choice at the first instance in cases of asthma complicated by infection before culture and sensitivity are available. The author concludes that major clinical conditions accompanying asthma are few, and complications of asthma are dehydration, reactivated tuberculosis, and chest deformities