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ORIGINAL TITLE	A Study of some aspects of the micobacterioses in Ceylon
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ABSTRACT	<p>In this work an attempt has been made to study some aspects of the "Mycobacterioses" in Ceylon. The mycobacterioses are infections Produced by the genus Mycobacterium. Mycobacterioses are seen allover the world and many aspects of these are as yet not investigated or are poorly investigated. These infections pose (special problems in the tropical and developing countries, but the information on these from the latter countries is scarce. The literature on any aspect of the mycobacterial infections in Ceylon is very scanty. The mycobacterioses like any other infections may be examined from two main points of View: 1.The reaction of the host to the parasite, and 2. The parasite. The reaction of the host to the parasite is embodied in the host's immunological responses to the parasite. These immunological responses may be of the cell mediated component and the humoral component. In this study the cell mediated response has been investigated using the differential (or comparative) tuberculin test, and the humoral response, using Takahashi's antitubercle phosphatide kaolin agglutination test for antiphosphatide antibodies. The differential tuberculin test was done on several population groups in Ceylon, viz. a) Persons of the general. population from rural areas who were not BCG vaccinated, b) Tuberculosis patients, c) BCG vaccinated persons in the general population, and d) Leprosy patients. The test was carried out in all groups using six different PPD antigens derived from Myco. tuberculosis (PPD-S), kansasii (PPD-Y, Runyon's Group I), Myco. scrofulaceum (PPD,Runyon's Group II), Myco. avium (PPD-A) and Myco. batteyii (PPD-B, both of Runyon's Group III) and Myco. fortuitum (PPD-F, Runyon's Group IV). The test technique used was the WHO Standard Tuberculin Test (Mantoux Test), each subject usually being given four PPD antigens. The investigation in the unvaccinated general. population showed that nontuberculous mycobacterial sensitisation and hence infection, was very common in Ceylon, and more common than tuberculous sensitisation. Marked differences in the degree and incidence of nontuberculous sensitisation were found to occur with altitude (the population investigated being at 3 different altitudes, 6,500 feet, 1,500 feet and at sea level), being lowest at high altitude and highest at sea level. No differences in pattern of sensitisation appeared to occur with increase of age (those tested being 12 years of age and above) and in the different sexes, at sea level and at mid altitude, but appeared to occur at the highest altitude. It was seen that at an elevation of 6,500 feet the incidence and degree</p>

of mycobacterial sensitisation appeared to increase with age and was greater in males than in females. Differences in pattern of sensitisation were also observed between Sinhalese and Tamils at midaltitude. It was suggested that differences in occupation was probably the cause of the higher degree and incidence of sensitisation seen in Sinhalese, viz. paddy cultivation by the latter. Evidence was produced from the veterinary field, from studies in cattle and buffaloes, in Kenya and Ceylon to support this finding. It was found that sensitisation among the Ceylonese populations tested was commonest to PPDs derived from Runyon's Group II and III organisms and least with Group I and IV organisms. The tuberculosis patients investigated were mostly from mid altitude areas similar to that described for the general population. It was found that there were both similarities and differences in the distributions of reactions to nontuberculous PPDs between the tuberculosis patients and the general population, from the mid altitude area studied. The possible causes for these are discussed. With PPD-S, the pattern of distribution seen in tuberculosis patients is markedly different from that of the general population group, but similar to that found in tuberculosis patients elsewhere in the world. No differences were found in the distributions of tuberculosis patients of different ages, sexes and of different races. Examination of the pattern of reactions to the different antigens shown by tuberculosis patients showed that clearly larger (dominant) reactions to PPD from Myco.tuberculosis was seen only in 60 percent of patients. Thus it was concluded that the differential test did not always identify the mycobacterial infection in tuberculosis patients. Comparison of.....