

INVESTIGATION ON THE FAMILIAL AGGREGATION AND SPATIAL AGGREGATION OF HUMAN LEISHMANIA INFECTION IN TANCHANG COUNTY, GANSU PROVINCE, CHINA

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Visceral Leishmaniasis, also known as kala-azar, is a vector-borne disease caused by the Leishmania species complex. In China, there have been a continuous popularity in hill-type kala-azar endemic areas, mainly in southern Gansu province and northern Sichuan province. The research aimed to investigate whether the distribution of human Leishmania infection showed the characteristics familial aggregation and spatial aggregation, and provides a reference for the further control of kala-azar. The binomial distribution goodness of fit test and SaTScan software were applied for analyzing family

GPS positioning information and laboratory test results of the family members. It was found that the distribution of human Leishmania infection corresponded to binomial distribution and did not conform to the family aggregation and spatial aggregation. In consideration of the local population and domestic animals were universally infected and widely distributed in different families and regions, their role as reservoir host during the spread of kala-azar should be emphasized. At the same time, it also implied vector control could be the key for kala-azar prevention and control in the hill-type endemic areas in Gansu province, China.

Biography

Guan Ya-yi obtained her doctoral degree in Chinese Center for Disease Control and Prevention (China CDC). Her research field is molecular epidemiology, health economics and global health. She obtained Bachelor and Master degree at Hunan Medical College (Changsha, Hunan province, P.R.China), Tongji Medical College (Wuhan, Hubei province, P.R.China), and Chulalongkorn University (Bangkok, Thailand). She has been working at the National Institute of Parasitic Diseases in Shanghai, China since 1989 and taken the role as principal investigators or key members of several projects on malaria, leishmaniasis and echinococcosis.

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