

Abstract

Between January and December 2003, stools samples from 267 inhabitants on Lanyu were examined by MIF, FEA, and a modified acid-fast staining technique for intestinal parasitic infections. Of the subjects examined, 19 were found to be positive and the overall infection rate was 7.1%. The infection rate of adult inhabitants (18.5%) was significantly higher than that of the school children (5.8%) and there was no significant differences between the rates of males (6.8%) and females (7.5%). Five species of intestinal parasites were found. These included 2 protozoa, 2 nematodes, and 1 tapeworm: Giardia lamblia 3.4%, Taenia saginata asiatica 1.5% Blastocystis hominis 1.1%, Trichuris trichiura 0.7%, and Strongyloides stercoralis 0.5%. All were single infections.

The epidemiological factors of intestinal parasitic infections were determined based on the results of stool examination and questionnaire survey. Although there were no significant associations between drinking water without boiling, rearing domestic animals (fowls) and pets, or using flush toilet and intestinal parasitic infections, washing before meals and after going to toilet was found to be significantly associated with the infections. Some of the school children on Lanyu still have the habit of eating raw meat and vegetables: 7.9% has consumed raw pork and 4.0% raw mutton. These eating habits were found to be varied among villages. The overall rate of pinworm infection in the school children was 7.9% and the highest rate was found in the Tung-Ching Primary School. Although the girls had a higher positive rate (9.4%) than the boys (6.7%), this difference was not statistically significant. The overall rate of head louse infestation in the school children was 32.9%. The girls (49.1%) had a significant higher rate than the boys (20.1%) and the highest rate (60.2%) was found in Lang-Tao Primary School.

Keywords : Lanyu ; intestinal parasites ; pinworm ; head louse ; epidemiological study