

Abstract

Amoebiasis is a disease caused by the intestinal protozoan parasite *Entamoeba histolytica*. World Health Organization lists it as one of the most important parasitic diseases. In Taiwan, people at high risk of infection include residents of mentally retarded institutions. The prevalence rate was estimated as 1-3% in mentally retarded institutions. In order to understand domestic prevalence of mentally retarded institutions, we carry out comprehensive stratified and cluster sampling to collect stool samples for estimating the prevalence of intestinal amoebic infection in mentally retarded institutions. Also, we perform questionnaire interview to explore risk factors related to Amoebiasis infection.

The results show that there are 15 ELISA positive stool samples collected from 1,996 residents living in 11 mentally retarded institutions in Taiwan. Among these 15 ELISA positives, 8 of them are PCR identified species of amoeba. The prevalence rate was then about 0.4% in these institutions. Results of analyzing collected questionnaires show that amoeba infection group was older than 40, education level less than primary school, and years of residence less than 10 relative to the normal residents. Self-feeding, ability to clean after using rest room, self-bathing, and asking for help were relative higher among PCR positive persons. Limited to few number of PCR positives, the result cannot bring various risk factors into statistically significance level.

Key words: amoebiasis, mentally retarded institution, screening, epidemiology