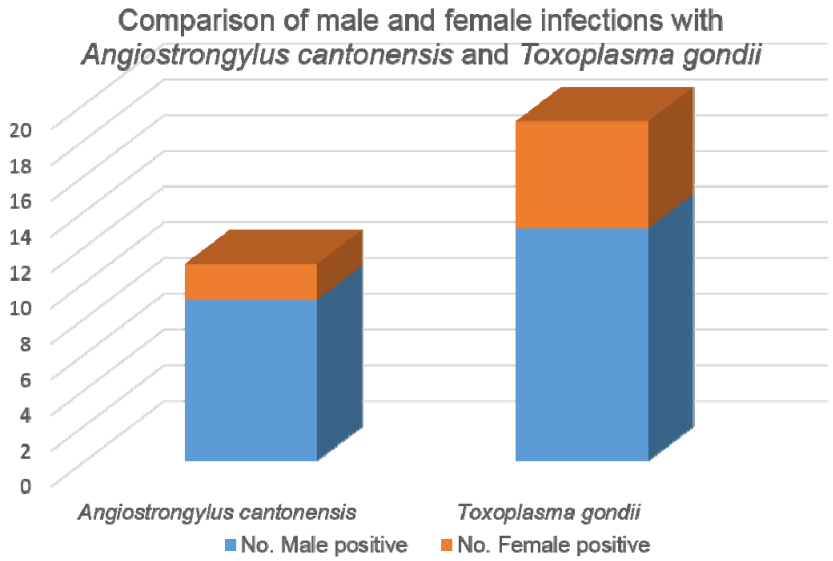
Serological investigation of *Toxoplasma gondii* and *Angiostrongylus cantonensis* in a Li village in Hainan, China

The map of Wangzha village, Changjiang Li Autonomous County, Hainan Province



Introduction

Li people is a unique nationality only live in mountainous area in Central Hainan, China. Li people have the custom of eating wild mice and snails.
This seroepidemiological study was set in a small li village, where little is known about *T. gondii* and *A. cantonensis* prevalence in li people.

Methods

83 serum samples of li people were collected from Wangzha village, Changjiang Li Autonomous County, Hainan Province.
Commercial ELISA Kits for IgG anti *T. gondii* and *A. cantonensis* were carried out according to the instructions of the kits.

Results

The infection rates of *T. gondii* and *A. cantonensis* of li people were 13.25% (11/83) and 22.89% (19/83), respectively, and were higher in male than in female patients (18.37% vs 6.25% and 26.53% vs 17.65%).

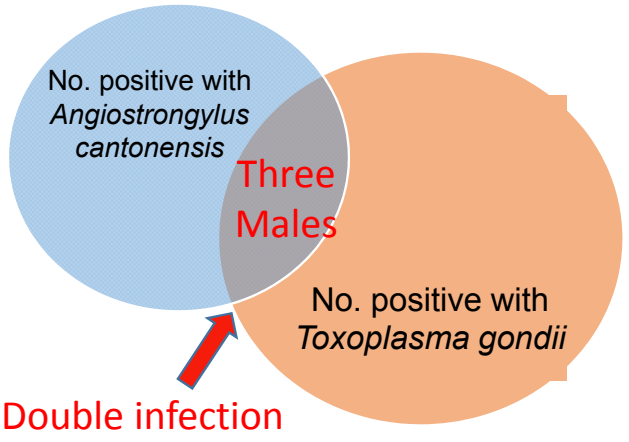
In addition, the average ages of male patients were younger than female patients (40.00 vs 66.50 and 41.92 vs 52.83). Meanwhile, 3 of these patients showed double infection, and they were all male.

The prevalence of *Angiostrongylus cantonensis* in Li village

	No. tested	Negative	Positive	Infection Rate (%)	Average Age
Male	49	40	9	18.37	40
Female	34	32	2	6.25	66.5
Total	83	72	11	13.25	53.25

The prevalence of *Toxoplasma gondii* in Li village

	No. tested	Negative	Positive	Infection Rate (%)	Average Age
Male	49	36	13	26.53	41.92
Female	34	29	6	17.65	52.83
Total	83	65	19	22.89	47.38



Conclusions

To our knowledge, this is the first reported serological investigation of *T. gondii* and *A. cantonensis* in the li people in Hainan. However, we need conduct further and intensive analysis by using molecular biology method to genotype identification of these pathogens.
The results provides baseline data that will be useful for controlling and preventing these pathogens in li village.