

## ZOONOTIC IMPACT OF TOXOPLASMA GONDII SERO-PREVALANCE IN NATURALLY INFECTED EGYPTIAN KITTENS

Mohey A Hassanain, Ashraf M Barakat\*, Hassan A ELfadaly, Nawal A  
Hassanain and Raafat M Shaapan

Department of Zoonotic Diseases, National Research Center, Giza, Egypt  
\*Corresponding author e-mail:ashrafbarakat\_2@yahoo.com

### ABSTRACT

**Background/Aim:** *Toxoplasma gondii* is an obligate intracellular coccidian that infects human being, warm blooded animals and birds. The life cycle cannot be completed without passing in the feline species which shed millions of un-sporulated oocysts. The oocysts become infectious after sporulation 2-5 days later and contaminate the surrounding environment with subsequent oral infection of final and intermediate hosts. The hazard played by kittens was evaluated by detecting the cats infected percent as bio-indicator to what extent the degree of Egyptian environmental contamination by *T. gondii* oocysts occurs .

**Methods:** A total number of ninety seven kittens, 34 and 63 stray and house-hold cats respectively were collected from different regions of Giza, Cairo and Kalubia Governorates. All cats were assayed serologically by using Latex agglutination test (LAT) and Sabin Feldman Dye Test (SFDT). The results were re-tabled after cats were reclassified to 72 & 25 un-weaned and weaned kittens respectively.

**Results:** Sero-positive percent of naturally infected Egyptian kittens was 70.6 & 50.8 % while the shedding percent was 4.17 & 0 % in un-weaned and weaned kittens respectively. Sero-negative kittens were better shedders [11.34%] than sero-positive ones [3.09%]. Significant difference was also recorded between stray vs house hold vs female's kittens.

**Conclusion:** Oocysts environmental contaminations maximize the incidence of human toxoplasmosis through the infection of slaughtered food animals which harboring tissue cysts. This necessitates control of urban outdoor cats inhabitants to reduce the risk of infection to human and animals.

**Keywords:** *Toxoplasma gondii*, Stray cats, LAT, SFDT, Egypt.