

**ORAL PRESENTATION 3**

**4:45 pm – 6:15 pm**

**Topic** Antibiotic Stewardship & Control Policy • Antifungals • Antimicrobials • Community-acquired Infections • Other Viral Infections • Parasitic Infections • Pharmacoeconomics

**Day/Date** Saturday, 4 December 2010

**Venue** Magnolia Room

**Chair(s)** Suma RAO, Singapore & Nelson LEE, Hong Kong

**OP-3-09 6:05 pm**

**A Survey of Immunoglobulin Titration Against Toxoplasmosis in Human Serum Samples in Isfahan Province of Iran**

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**Background:** Toxoplasmosis is one of the prevalent parasite diseases common to human and domestic animals of which cause if a protozoa called *Toxoplasma gondii*. This parasite — a phylum of protozoan — is the intracellular obligate parasite which is able to contaminate the cells in most of warm-blooded vertebrates like human and domestic and also some species of mammals and birds. Millions of people in all parts of the world are infected to chronic infection and non-symptomatic toxoplasmosis that in one way brings about dangerous issues and problems during pregnancy and before birth and in another way, causes death in people with immune compromise. According to statistics, at least one third of world population have antibody against this parasite that shows they have already been exposed to this organism. This study has been done as long as there are no enough researches concerning the contaminated prevalence of *Toxoplasma gondii* and also the frequency of cats and a frequent number of abortion in Esfahan.

**Method:** In this study, 1005 sample of blood serum containing 503 male (50.4%) and 502 female (49.95%) were collected by systematic cluster sampling and examined by IFAT method.

**Result:** Through this examination, it was found that 410 samples (40.7%) 225 female (44.82%) & 185 male (36.77%) had antibody against Toxoplasmosis with different titers from 1/100 to 1/12800. Concerning the age group, it was found that the least percentage of antibody was among the age group of 5–9 (24.3%) and the most percentage was among the age group of 40–49 (55.7%). It was also cited that the percentage of contamination was biased toward female than male that will be analyzed later. 41 urban and rural areas in Esfahan city were selected and classified as following: **Group 1** the highest prevalence is in Semirum 50% – Najafabad 48.7% – Zarinshahr 48.3% – Khomeinishahr 48.1%. **Group 2** Ardestan 42.8% – Natanz 42.4% – Kashan 41.3%. **Group 3** Falavarjan 39.3% – Daranvillages 39.2% – Daran 8.8% – Shahreza 38.4% – Esfahan 37.9% – Fereidonshahr 36.6%. **Group 4** the lowest prevalence is Khor 33.3% – Khansar 33.3% – Golplayegan %30.3. The reason of prevalence differences in the above-mentioned areas of Esfahan province will be analyzed later.

**Conclusion:** These findings indicate the existence of contaminated prevalence in Esfahan that requires more attention and some hygienic planning should be taken to control and prevent this disease.

**Keywords:** *Toxoplasma gondii*, Toxoplasmosis, Seroepidemiology.

