#### **Poster Presentations**

### PP-189 Finding and molecular typing simultaneous of three *Leishmania* species in Kalybar, a focus of visceral leishmaniasis in northwest Iran

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**Background:** *Leishmania infantum* is the causative agent of visceral leishmaniasis (VL). Based on isoenzyme typing of a few isolates from patients and domestic dogs, this parasite was considered to predominate in the Kalybar focus of VL in northwest Iran. There is no report of sandfly infections in this region so this research was done.

**Methods:** Sandflies were sampled using sticky paper and CDC traps. Morphological identifications were based on characters of the head and abdominal terminalia. DNA was extracted from sandflies abdomens and thoraxes. ITS-rDNA gene of *Leishmania* parasite was detected using Nested PCR. *Leishmania* was identified after sequencing.

**Results:** For the first time three *Leishmania infantum*, *L. tropica* and *L. major* were identified.

Five Phlebotomus perfiliewi, a vector of VL, were found to be infected with Leishmania. One out of five P. perfiliewi was found to be L. infantum and four other infections were of haplotypes of L. tropica based on the PCR detection and sequencing of parasite ITS-rDNA. Leishmania major was found to other sandfly species.

**Conclusion:** *L. infantum* as causative agent of VL, *L. tropica* and *L. major* as the causative agents of anthroponotic and zoonotic of cutaneous leishmaniasis were reported in Iran and in the Middle East. The widespread distribution of *L. tropica* to compare *L. infantum* in the Kalybar focus suggests that *L. tropica* should be considered as well as *L. infantum* as causative agents of VL.

#### PP-190 Evaluation of *Leishmania* infection in *Rhombomis opimus* as a main reservoir host of Zoonotic Cutaneous Leishmaniasis in Turkemen Sahara, Iran

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**Background:** Zoonotic Cutaneous Leishmaniasis (ZCL) is a great health problem in many parts of world and in Iran. Turkemen Sahara is an important focus of disease in Iran. *Leishmania major* causative agent of (ZCL) in reservoirs host in Turkemen Sahara until now did not identified definitely because no typed molecularly. For this a joined research project designed by Pasteur Institute of Iran, Shahid Beheshti and Golastan Medical Science University, since 2008.

**Methods:** Rodents were captured by live trap baited with cucumber. After identifying rodents species by systematic keys, impression smear of each ears prepared by scratching ears, then *Leishmania* were examined. Samples and serous from rodents ears were cultured in NNN, also injected subcutaneously at the base tail of the Balb/C. The genomic DNA of each rodent ear and any parasite within it extracted using ISH\_Horovize method. Samples were identified by Nested-PCR techniques, using *Leishmania* ITS-rDNA gene in rodents.

**Results:** 227 *Rombomis opimus* in 12 villages were captured. *Leishmania* infection were found in all routine test such as direct smear, inoculation in Balb/C and in NNN medium. For first time *L. major* parasite sequenced in this rodent from Turkemen Sahara using ITS-rDNA gene.

**Conclusion:** High prevalence and distribution of *R.. opimus* in Turkemen Sahara and infection with *L. major* show that *R.. opimus* is a main reservoir host of (ZCL) in Turkemen

Sahara, Iran. Control program of reservoirs of ZCL should be focused on this rodent.

## PP-191 Detection of *Trichomonas vaginalis* and *Neisseria gonorrhoeae* from vaginal discharge of women attended in gynecology clinics

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**Objectives:** Sexually transmitted infections constitute an important global public health problem. The sensitive and specific methods for diagnosis of *Trichomonas vaginalis* and *Neisseria gonorrhoeae* in order to reduce transmission are crucial. These pathogens are most frequently involved in urethral and cervical infection. Infected patients are more susceptible to acquire HIV/AIDS.

**Methods:** In this study samples obtained from vaginal discharge of women attended in gynecology clinics of Evin house of detention and Rajaee Shar prison. TYI-S-33 culture media and direct smear for detecting *T. vaginalis*, and for *N. gonorrhoeae*, modified Thayer Martin media, oxidase, catalase, biomedical tests and Gram stain were used.

**Results:** Out of 377 samples, forty-one (11%) were positive for *T. vaginalis*, but none found to be positive for *N. gonorrhoeae*. Out of 41 positive vaginal discharge samples, 36 urine samples of patients were positive in culture media.

**Conclusion:** With respect to importance of sexually transmitted infections worldwide, led to this study. *N. gonorrhoeae* is very sensitive to antibiotics, if somebody takes drug for other problems, also can affect the results. Although other studies showed that the prevalence of gonorrhea is very low in Iran, but sensitive molecular methods for confirming the results is recommended.

# PP-192 Leishmaniasis in Armenia

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**Objective:** Leishmaniasis is endemic for 88 countries. There are 12 million people affected with leishmaniasis worldwide and annually are registered 2 million new cases of the disease.

Leishmaniasis is a disease which can be endemic, epidemic or sporadic, caused by *L. donovani*.

The aim of this study is to estimate distribution of the disease in Armenia.

**Methods:** During 2008–2009 in our hospital had been admitted 31 patients, among which 27 are under 1 year, 3 patients 1–5 year, 1 is 22 years old. By sex 11 are female, 20 are male.

*Screening test*: specific IgG, and IgM, parasitological (bone marrow), also biochemical, clinical blood test and instrumental investigations.

**Results:** In all cases onset of the disease is acute with long term fever ( $39-40^{\circ}$ C). Intoxication syndrome was very expressed, as well as loss of weight. All of patients had predominantly splenomegaly, and hepatomegaly with or without liver disfunction. Pancytopenia is typical (100%), as well as hypoalbuminemia were constant signs of leishmaniasis in our patients. Positive parasitological (*L. donovani*) were observed in 29 patients, and serological were observed in all of them.

All of the patients received Meglumin antimoniate (glukantime) according to schedule. Recovery registered in 20 patients with the full improvement of the function of