Conclusions: The prevalence of E. histolytica infection among mentally retarded institutions in Taiwan was not as high as estimated, though 8 asymptomatic carriers found. To prevent the disease, those institutions should be screened periodically, and asymptomatic carriers should be treated. Implementation of personal hygiene for the inmates is crucial.

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65.013

Survey of Hydatid Cyst in Tabriz Slaughter House Killed Animals and Infected Human Cases in Health Center of Tabriz in 2006–2007

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Keywords: Tabriz; Hydatid cyst; Human; Slaughter house killed animals

Hydatid cyst is produced by Echinococcus granulosus and it is one of the most important zoonotic infections distributed in the world. Definitive host of this parasite is canivores and it is intermediate host is wild and domestic ruminants. In Iran Hydatid cyst infection rate is reported between 11.2% to 64%. By notice to much important of Hydatidosis and many different reports of infection distribution in Iran a survey was developed about the hydatid cyst infection rate in animals and humans of Tabriz city. Based on results of survey hydatid cyst infection rate in 2006–2007 in Tabriz was: In 2006, of the 294540 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%). In 2007, of the 33227 sheep, infection liver rate were 137437 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%). In 2006, of the 294540 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%). In 2007, of the 33227 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%). In 2006, of the 294540 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%). In 2007, of the 33227 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%). In 2006, of the 294540 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%). In 2007, of the 33227 sheep, infection liver rate were 16402 (11.9%) and infection lung rate were 20 (20.6%).

Prevalence of Toxocara canis in Stray Dogs in Northern Iran

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Background and objective: Toxocara canis is one of the most common parasites living in the intestine of domestic and stray dogs. A dog eliminates thousands of eggs into the environment that are potential etiological factor for human toxocariasis. The present study was undertaken to determine the prevalence of T.canis in stray dogs in Mazandaran, Iran.

Methods: In this cross-sectional study, during the period from April to September 2007, 50 juvenile and adult stray dogs were collected by shooting from urban areas of Sari city, Northern Iran. They were necropsied and the gastrointestinal tract was opened. Recovered parasites were fixed in alcohol and stained in carmine. Faecal specimens also were examined by the formalin ether concentration method.

Results: A total of 27 adult and 23 juvenile dogs were examined with 11 adults (40.7%) and 19 juveniles (82.6%) being infected with T. canis with an overall prevalence of 60%. There were significant differences in the prevalence of infection between adult and juvenile dogs (P = 0.003). There were no significant differences in the prevalence of infection between male and female dogs (P > 0.05).

Conclusion: Considering the high prevalence of this zoonotic parasite and its hygienic significance in causing human toxocariasis, particularly in children, plus the lack of control of stray cat populations, there is a need to improve personal and food hygiene as well controlling stray dogs in these urban areas.

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65.015

CD 28 Gene Polymorphism and Plasma Concentration of Soluble CD 28 in Iranian Patients with Visceral Leishmaniasis

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Background: It has been demonstrated that CD 28 plays an essential role in the effectiveness of T-cell immune responses. In visceral leishmaniasis (VL), the resolution of infection and the development of protective immunity are associated with expansion of leishmania-specific T-cell responses. In this study we aimed to investigate the CD 28 gene polymorphism and plasma levels of soluble (s) CD 28 molecule in Iranian patients with VL.

Methods: In a cross-sectional study, plasma concentrations of CD 28 in 88 patients with VL, 132 individual
with subclinical leishmaniasis, and 100 seronegative healthy controls were measured by enzyme-linked immunosorbent assay. Genotyping of CD 28 gene polymorphism was performed by polymerase chain reaction based allelotyping method using allele-specific primers for C or T at intron 3 position +17 in three groups.

Results: The frequency of CC genotype was significantly higher in subclinical VL patients (42.4%) than active VL group (27.3%) and healthy controls (16%) (p < 0.001). Also, the frequency of allele C among subclinical VL group (57.6%) was significantly higher than active VL (40.9%) and control groups (34%) (p = 0.003). No significant differences were observed between the plasma levels of sCD 28 in three groups.

Conclusion: Our findings suggest that the CD 28 gene may have significant role in the protection of active VL in the Iranian population.

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65.016

Proteases Secreted by the Infective Larvae of *Toxocara canis* and Partial Purification of a 50 kDa Protease

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*Toxocara canis* is a nematode parasite of dogs, a causative agent for human toxocariasis. It has become a major zoono-parasitic infection in Sri Lanka. Infective second-stage larvae of *T. canis* secrete proteolytic enzymes which are thought to be instrumental in their tissue-migration process. Therefore, this study aimed at identifying proteolytic enzymes which are involved in the metabolic pathway of these parasites and thereby targeting a specific enzyme for the control of the infection. Proteolytic activity of these larvae during culture in vitro was determined by gelatin zymography, pH optimum and substrate and inhibitor specificity. A partial purification of a 50 kDa protease was done using DEAE-anion exchange chromatography which was characterized for its optimum pH, temperature and inhibitor sensitivity.

Excretory-secretory products of infective larvae showed proteolytic activity as seven bands in gelatin zymography with their molecular weights lie between 175 kDa to 20 kDa. The optimal pH value for these protease activities was observed between pH 5.5 to 6.5 and activity was optimum in albumin over gelatin and casein. These activities were inhibited by serine, cystein and metallo protease inhibitors. 50 kDa protease was partially purified by using DEAE-anion exchange chromatography and its activity was optimum in pH 8.5 at 70 °C. This protease activity was inhibited by serine, cystein and metallo protease inhibitors.

Proteases secreted by *T. canis* infective larvae exhibit diversity in classes of proteases, based on the differential migration in polyacrylamide gels containing gelatin. This result clearly demonstrates the heterogeneity of larval proteases so might be involved in different functions during the larval migration. Partially purified 50 kDa protease might involve in a specific function by which, inhibition of this enzymes activity may arrest the activity of infective larvae. Therefore, this enzyme could be target candidate to control of toxocariasis by inhibition with chemical or immunological methods.

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65.017

Seropervalence Toxocariasis in Children Aged 2—15 Referring to the Hospitals and Medical Centers in Zanjan, Iran During the Year 2007

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Keywords: Toxocariasis; VLM; OLM; ELISA; Zanjan

Background: Toxocariasis is a cosmopolitan disease with a high prevalence among children. Oral entrance of the parasite eggs into the body and release of the larva in intestine and their entering to bloodstream results in visceral larva migrans (VLM) and ocular larva migrans (OLM). This study is aimed to study the amount of serum IgG against *Toxocara in children aged 2—15* who referred to the hospitals and health centers of Zanjan province in 2007.

Method: In this cross-sectional study, blood samples from 810 children aged 2—15 referring to the medical centers and hospitals were collected. The presence of IgG against stage 2 larva was detected by ELISA. Data related to age and degree, education of parents and children, history of illnesses, washing hands and contact with cats and dogs were collected through questionnaires. The collected data were analyzed by SPSS 11.5 for windows package using Chi-square test.

Results: The overall seroprevalence of Toxocariasis in children aged 2—15 years, was found to be 2.7% (22 cases). The titer of IgG in rural and urban population was 4.4% and 1.6% respectively. Contact with cats and infectious were statistically significant. No significant relation was found between the infectious and the level of education of children and their parents, hand washing, contact with dogs and history of disease and location (P > 0.05).

Conclusion: This study shows that *Toxocara* exists in Zanjand can effect children aged 2—15. Thus, informing parents and children about the risk factors of infection transmission and related complications is recommended. Moreover, we should draw physician attention to the disease and symptoms that are similar to other infections diseases.

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65.018

The Identification of Cryptosporidium Species by PCR-RFLP Analysis of the 18s rRNA Gene

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Background: Cryptosporidium is an important protozoa that cause diarrheal illness in humans and animals. In immunocompetent individuals, infection is usually self-