билан зарарланиши аниқланди. Бир ёшдан икки ёшгача ва катта ёшдаги қўйларда ёзда трихоцефаллар билан инвазияланиш пасаяди. Айнан шундай эпизоотологик ҳолатни тоғолди-тоғ биоценозларида ҳам кузатиш мумкин.

Хулоса: Самарқанд вилояти шароитида қўйлар орасида трихоцефалёзни бир мунча кенг тарқалганлиги ва уни икки турга оид трихоцефаллар *Trichocephalus ovis ва T. skrjabini* лар қўзғатилиши аниқланди.

SCREENING FOR TOXOCARIASIS OF PATIENTS WITH ALLERGIC DISEASES

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Toxocariasis is a disease of humans caused by larvae (immature worms) of either the dog roundworm (Toxocara canis) or the cat roundworm (Toxocara cati). Toxocariasis is often called visceral larva migrans. This zoonotic, helminthic infection is a major cause of blindness and may provoke rheumatic, neurologic or asthmatic symptoms. Humans normally become infected by ingestion of embryonated eggs from contaminated sources (soil, fresh or unwashed vegetables).

Diagnosis of toxocariasis is difficult in view of polymorphism and uncertainty of clinical manifestations. Clinical manifestations of toxocariasis do not have their own specific features, complicating the diagnosis of the disease. Patients often focus doctor's attention on previously established diagnosis: bronchial asthma, atopic dermatitis and other. Eosinophilia is often severe and sometimes represents the only sign of infection, except in ocular and neurological forms. Therefore, a key role in diagnosis belongs to laboratory methods of diagnostics.

The object. Optimization of diagnosis of toxocariasis among high risk groups.

Materials and methods. 30 patients aged 21 to 55 years (men - 17, women – 13) were under our supervision. 19 of them were in the in-patient Department of the specialized allergological center, 11 patients were treated in outpatient clinics allergological center and Republic infectious diseases clinic. We have examined for toxocariasis 30 patients with chronic allergic diseases (bronchial asthma, urticaria, atopic dermatitis), and patients with high level of eosinophils of unknown etiology. During the study all the patients were carefully analyzed for the history of the illness, accent has been made on epidemiological anamnesis. Collecting epidemiological history we asked about the presence of an animal in the house, especially the dogs and the presence of pietism (geophagia). Clinical and laboratory examination were carried out. Serological testing for toxocariasis was performed at the laboratory of immunology of parasites, by using ELISA test system "Toxocara-strip".

Results. Positive results were received in 14 patients from 30 examined patients. The frequency of major clinical manifestations of toxocariasis was presented as follows: manifestations of allergic skin rash - 7 (50,0%), astheno-vegetative syndrome - in 11 (78,5%), intoxication syndrome - in 10 (71.4%), pulmonary syndrome in 5 (35.7%), enlargement of lymph nodes - 4 (28,5%), alopecia in 1 (7,1%). In peripheral blood eosinophilia were found in 13 (92,8%) patients.

Conclusion. Based on epidemiological analysis it was established that the key risk factors for infection with T. canis are existence of geophagia and/or contact with a dog (79%). The range of clinical variants of toxocariasis course varies to a great extent. These data coincide with the literature data. The most frequently toxocariasis was diagnosed in patients with allergic skin rash (50,0%), astheno-vegetative syndrome (78,5%), intoxication syndrome (71,4%) and high titers of antibodies to T. canis.

LEISHMANIASIS PREVENTION BY LEISHMANIZATION OR VACCINES: A BRIEF OVERVIEW

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Leishmaniasis is among the neglected diseases which are reported from 98 countries. According to World Health Organization (WHO) estimation a tenth of the world population is at risk of contracting the disease, and 12 million are affected, the annual incidence rate being 1.5-2 million. Leishmaniasis clinical manifestations depend upon the *Leishmania* species which causes the disease and the host immune response, the clinical forms ranging from a self-healing cutaneous leishmaniasis (CL) to a lethal visceral form. Vector and reservoir control are not always possible and

require infrastructure beyond the means of endemic areas. The standard treatment is toxic, costly and needs a prolonged series of daily injections, the efficacy is variable and resistance is rapidly developing in many countries. Individuals upon cure of CL lesion induced by natural infection or leishmanization (LZ) are protected against further lesion development, induction of protection in experimental model of leishmaniasis is achieved, most of the *Leishmania* parasites are easily cultured. For all these reasons, in 1980s, global mobilization to develop an effective vaccine against leishmaniasis under GMP/GCP guidelines with support of WHO/TDR was initiated in new world and old world. Several candidate antigens were introduced and a few of the first generation (killed parasite) vaccines were reached to phase 3 trials. The results of efficacy trials in Brazil, Colombia, Ecuador, Iran and Sudan using single and multiple doses of first generation vaccines with or without BCG are safe but not enough immunogenic to protect against *Leishmania* infection. So far no vaccine is available against any form of the disease.

Leishmanization is an inoculation of live virulent *Leishmania major* to a predetermined part of the body to induce a lesion similar to natural infection. Leishmanized individuals are protected against further natural infection which might be multiple lesions in exposed parts of the body such as on the face. LZ was practiced in Asian countries for centuries and originally exudates of an active lesion was used to scratch on buttocks of susceptible individuals. When culture media was developed, *Leishmania* promastigotes from culture media were used for inoculation in the early 1930s. LZ was practiced in Uzbekistan, Israel and Iran. In the 1980s, as a preventive measure, massive LZ was performed in Iran in which more than 2 million soldiers and children were leishmanized. The results of LZ in different endemic regions showed the LZ is the most effective control measure against CL, but accompanies limitations. Endemic countries need to resume LZ and research on LZ issues should be prioritized to standardize *Leishmania* stabilates, develop well defined serum free media and possibly lyophilize *Leishmania*. To facilitate vaccine development, LZ should be used as live challenge to evaluate candidate vaccines. The objective of the current presentation is to overview history of *Leishmania* vaccines and LZ.

CUTANEOUS LEISHMANIASIS TREATMENT: A BRIEF OVERVIEW

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Human infection with *Leishmania* parasites presents several different clinical forms of diseases; Cutaneous Leishmaniasis (CL), the most common form of the disease and Visceral Leishmaniasis (VL) which is the fetal form of the disease. Due to the diversity of epidemiological characteristics, specific to each species and its environment, vector and reservoir control are impractical, costly and usually requires political commitment and infrastructures beyond the means of the countries suffering most from this disease and as such the disease is expanding to new foci and the incidence rate is increasing in some of the endemic areas. CL is usually a self healing lesion but leaves a disfiguring scar which leads to stigma, isolation and barrier to marriage, especially for girls. In case of severe forms of CL such as recidivans and non healing forms no efficacious treatment is available. Pentavalent antimonials (Sb^{+5}) have been introduced since 1930s and still is the first-line WHO recommended treatment for all types of CL. Antimonials require multiple injections which is uncomfortable and painful, so full recommended course is not tolerated by most of the patients and resulted in low compliance. The efficacy of antimonials depends upon the *Leishmania* species and usually is low and resistant is reported. Moreover, Antimonials are contraindicated in pregnancy, heart/renal failure, hepatic disease and diabetes and accompanies serious side effects which in the worst scenario, it might cause death if not carefully monitored. CL patients do not need hospitalization so the cost of treatment is not high, but still is not affordable for most the endemic areas. Development of safe and efficacious drugs is urgently needed. There is no global interest in drug development against CL, so endemic countries, NGOs and international agencies need to invest. Clinical trials to assess the efficacy of various modalities on leishmaniasis have been carried out in different parts of the world, but mostly suffer from inadequacies related different issues such as design, sample size, endpoints and etc. Currently, in addition to antimonials several lines of drugs like Ambisome (liposomal form of Amphotericin B), Miltefosine and Paromomycine are available for the treatment of VL but not CL. Clinical trials on CL using chemotherapy, physical therapy, traditional medicine and immunotherapy have been published. In this presentation, various clinical trials of