(OR: 0.816, CI: 0.683–0.974) was seen less in those with itch sensitivity (P < 0.05).

Conclusion: The absence of itch sensitivity may increase the risk of acquiring the disease and add to the severity and that a strong local immune response may prevents or limit the manifestations of a systemic infection.

Free Paper Presentation 8: Parasitic and GI Infections
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Convention Hall 2C

PL-008 Systemic leishmaniasis are inhibited by acetylsalicylic acid via nitric oxide pathway in Leishmania major infected susceptible Balb/c mice

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Objectives: Leishmaniasis is a zoonotic disease caused by Leishmania parasites ranging from lesion to severe cutaneous/visceral leishmaniasis. Nitric oxide as a free radical released during an inflammatory response and involved in the microbicidal activity of macrophages. Acetyl salisylic acid inhibits inflammatory reactions but little is known about its effects on CL therapy. The purpose of this study was to evaluate antileishmanial effects of ASA via NO pathway in susceptible Balb/c mice infected with L. major.

Methods: Experimental leishmaniasis was initiated by injection of Leishmania promastigotes into mice. ASA was inoculated orally after lesion appearance using gavages once a day up to 13 weeks. The development of lesion was determined weekly and animals were humanely killed once a day up to 13 weeks. The development of lesion inoculated orally after lesion appearance using gavages once a day up to 13 weeks. The development of lesion was determined weekly and animals were humanely killed once a day up to 13 weeks.

Results: Results showed ASA increased NO production in plasma of both naive and Leishmania groups. A sharp impression smears prepared. Griess microassay was applied and target tissues were removed, weighted and their NO concentration was determined weekly and animals were humanely killed once a day up to 13 weeks. The development of lesion inoculated orally after lesion appearance using gavages once a day up to 13 weeks. The development of lesion was determined weekly and animals were humanely killed once a day up to 13 weeks.

Conclusion: ASA presented its ability to elevate NO concentration in plasma during systemic leishmaniasis in mice and it decreased parasite visceralization in target organs as well as declining its proliferation inside macrophages with less effect on lesion size. It presented no significant effects on hepatosplenomegaly and decrease survival rate and body weight. Results indicated some antileishmanial effects of ASA by alterations of NO as immunomodulatory factor in L. major infected Balb/c mice.

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OL-036 Prevalence of canine scabies in Korean stray dogs

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Background: Recently the number of stray dog is proportionate with the increase of the number of the companion dog. Sarcoptes scabiei var. canis, causing scabies, is one of the most important canine zoonotic arthropod in Korea and around the world. Thus, we have tried to know the prevalence of canine scabies in the stray dog in Korea.

Methods: A total of 565 stray dogs were collected from the rescue centers all over the country. They were grouped with euthanasia or natural death and examined for the sex and age estimated by dental formula. To identify the lesions, the whole body was grossly examined and tested pathologically.

Results: Thirty-two (5.66%) of 565 dogs were diagnosed to have canine scabies. Demodicosis and pediculosus also detected in seven cases, respectively. Dogs from urban areas had fewer scabies (0.62%) than that of rural areas (12.5%). Prevalence of scabies in male dogs and female dogs was no difference as 5.96% and 5.25%. Euthanasia group showed higher prevalence (6.48%) than natural death group (2.44%) in scabies. Old dogs over five years showed lower infestation (1.82%) in scabies. In histopathological examination, there were mites in the burrows formed in the subcorneal space. Acanthosis, hyperkeratosis with crust, and vascular dilatation were main findings.

Conclusion: One hundred thirteen (20%) of 565 stray dogs were diagnosed to have skin disease. Among them, canine scabies is the most prominent ectoparasite as 5.66%. With previous reports on human infection in Korea, canine scabies must be regarded as the important zoonotic canine skin disease. Accordingly, for the human and canine hygiene it is imperative that stray dogs with skin problems are segregated and tested for parasites to treat properly as soon as arriving at rescue shelter.

OL-037 Effect of treatment with antifibrotic drugs in combination with PZQ in immunized Schistosoma mansoni infected murine model

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Background: The main problem in schistosomal hepatic morbidity is fibrosis and extensive scarring induced by living eggs. In this study, we tried to study the effect of treatment using anthelminthic drug (PZQ) and/or antifibrotic drugs (PTX or silymarin) in combination with immunization.

Methods: The parasitological parameters, the dynamics of serum-specific immunoglobulins and splenic cytokines associated with changes in granuloma diameter were assessed. Naïve mice were immunized intravenously with 10 ug of SEA in three doses at 2 days intervals 6 weeks before infection. Animals were infected by tail immersion with 100 cercariae and divided into several groups. Three groups were treated with PZQ, PTX or silymarin administered alone. Another two groups were treated with PZQ combined with PTX or silymarin. All treated animals and respective controls were sacrificed 12 weeks post infection.

Results: Immunization did not affect worm reduction, but slight decrease in granuloma diameter, increase in immunoglobulins and cytokines was observed. Reduction in worm burden was associated with reduction in ova count and changes in oogram pattern which were mainly due to PZQ treatment. Increasing reduction in granuloma