

## Dog owners - beware

Kyrenia Animal Rescue want to make people aware of a disease that is fast becoming widespread throughout Cyprus. Buying a 'Paraband' collar, or a similar anti-sand fly collar, from a local vet or chemist shop can prevent the spread of what can be, if not diagnosed and treated soon enough, a fatal condition for dogs.

Leishmania are little parasites (protozoa) which affect the white blood cells, causing systemic disease, mainly in dogs.

The transmission of Leishmaniosis is by the Sand Fly, a very tiny fly with white wings. The female sand flies suck blood from their victims in order to breed their eggs later. The distribution of the sand fly, and with it, the risk of leishmaniosis infection, is prevalent all over the Mediterranean areas, the South of France, Southern Italy, Southern Spain and Portugal, as well as India and Africa.

The transmission of leishmaniosis occurs as follows:

A sand fly bites a dog which is carrying leishmaniosis. Later, the same sand fly bites a healthy dog and injects leishmania with her saliva under the skin of the dog. From the site of infection, the 'chancre', the leishmania start a very difficult development in several steps until they reach the blood and after an incubation period of between 3 weeks and 3 months (sometimes 3 years), depending on the state of the dog's defence system, the first visible symptoms occur.

The sand fly is active between April and November (during the warm season) and disappears in winter. The sand fly hides during the daytime and comes out late afternoon with the highest period of activity occurring at night between 2.00am and 4.00am. Therefore, dogs that live outside are much more exposed to sand fly bites than dogs that live inside - especially if the house is well protected against mosquitoes with nets and chemical products. The month of August is the worst, and this is when the highest amount of sand flies are registered. This is when they are most likely to invade the house where they will hide in dark bathrooms or wardrobes.

The symptoms of leishmaniosis to look for in your dog are:

Skin alterations (dry, flaky skin), eye alterations, weight loss, long growth of nails, swollen lymph glands, liver and kidney disease (including kidney failure), alterations in blood coagulation with anaemia, nose bleeding, lameness, chronic diarrhoea etc.

The diagnosis of leishmaniosis is mainly by blood test, together with a general clinical check and control of the liver and kidney functions.

Treatment of leishmaniosis in a dog is only effective if begun at an early stage of the infection, better even before they show any symptoms. Therefore, it is very important to make regular blood tests in dogs, once a year and better in the winter months, to find out if the dog was infected during the summer. Early treatment normally avoids symptoms and gives the dog a longer life.

Dogs with mild symptoms can be treated successfully as well, but dogs with serious anaemia or serious alteration of liver/kidney function very often cannot be treated successfully.

## **Prevention of Leishmaniosis**

It is very difficult to prevent leishmaniosis 100%, because sand flies are so very tiny they can even penetrate mosquito netting, but there are 3 key points to help avoid risk of infection.

A. Dogs should be kept inside at night to reduce exposure to sand fly bites.

B. Provide your dog with a special anti-sand fly collar which is proven to be more effective than other insecticides. Start in March with the collar application and maintain it until the end of November, or better still keep the dog collared all year round.

C. A yearly blood test to make sure your dog has not contracted this disease.

There is still no vaccination against leishmaniosis, but investigation into this subject is advancing.