## Proceeding of the SEVC Southern European Veterinary Conference

Oct. 17-19, 2008 – Barcelona, Spain



http://www.sevc.info

Reprinted in the IVIS website with the permission of the SEVC <a href="https://www.ivis.org">www.ivis.org</a>

## How I Treat... Leishmaniasis

Dr L. Ferrer

Departament de Medicina i Cirurgia Animals, Facultat de Veterinària, UNIVERSITAT AUTÒNOMA DE BARCELONA, BARCELONA, ESPAÑA

The basic facts of the treatment of leishmaniosis are the following:

- 1. The diagnosis has to be accurate and firm. A positive PCR result does not suffice (it will only prove infection) as does not either an equivocal result or low antibodies levels. It is necessary to prove that the clinical signs (or some of them) are indeed due to an infection caused by Leishmania.
- 2. A proper clinical examination of the patient with appropiate tests will have to carried out. Leishmaniosis in the dog is a systemic disease and can affect nearly all organs and systems in the body. We have to perform a thorough physical examination (including ophtalmological examination), haemogram, protein analysis, full biochemistry profile and full urinalysis. It is particularly important to assess renal function and evaluate the degree of proteinuria. It also proves useful to quantify the levels of anti-Leishmania antibodies. Every single clinical sign will have to be fully investigated and evaluated, as well as any abnormality in the test results. Sometimes, leishmaniosis can be a consequence of another disease (particulary in older dogs).
- 3. Other co-existing infections have to be investigated, since they are very frequent. In every region the agents will vary.
- 4. Secondary infections have to be properly treated (pyoderma, ehrlichiosis...) as well as any other abnormality detected (renal insufficiency).
- 5. We have to pay attention too to the general condition and nutrition of the animal. There is in the market a specific nutritional product for these cases (Advance Leishmania-ManagementR). If this is not available, a suitable alternative can be recommended, considering a product of the top spectrum of the market range, with high levels of good quality protein. Any immunesuppresant drug (corticosteroids, cyclosporine) is strictly contraindicated.
- 6. The specific protocol used in Hospital Clínico Veterinario of the UAB is as follows:
  - GlucantimeR, 80 mg/kg/24 (or 40 mg/kg/12h), SC; 1 month and
  - Alopurinol 10 mg/kg/12h, PO, 1 year (minimum)
- 7. In benign cases (for example, if there are only cutaneous lesions, without any type of serious biochemistry abnormalities and low levels of antibodies) we occasionally use only allopurinol (10 mg/kg/12h, PO).
- 8. In cases where the response is poor or incomplete, we start a new course of Glucantime® (1 month), and continue allopurinol. If the response is still not satisfactory, probably due to the development of resistance, we can then administer miltefosin (Milteforan®) at doses of 3mg/kg/day, PO, for 1 month.
- 9. Patients will need monitoring (physical examination, haemogram, serology, proteinogram, biochemistry, urinalysis) 1 month, 3 months and 6 months after the start of the treatment. After that,

the patient will be reassessed twice a year and then annually.