



Interferon in Feline Chronic Gingivitis Stomatitis syndrome (FCGS)

A number of veterinary dental specialists report using Feline Recombinant Interferon Omega (Virbagen: Virbac) and studies appear to indicate that it equals or exceeds the potential of other treatments for this condition. (Hennet 2011)

A consensus statement by a group of European specialists in late 2010 indicated feline recombinant interferon omega is most effectively used in the group of cats which are FCV positive and are long term non-responders to full mouth extraction.

Our own studies over eight years indicate that not only is interferon very helpful in reducing inflammation and improving comfort levels but it also allows practices to drop other treatments likely to have significant side-effects. Our protocol is described below.

Oral use

Interferon given per os is believed to work by initiating a cytokine cascade when it comes into contact with cells to provide an immunomodulatory effect over a long period of time. The cascade then has distant effects. It is the least expensive regime but does not work in all cases.

The contents of a 10MU vial is reconstituted and injected into a 100ml bag of sterile saline. Ten separate fractions of 10ml are created, which are then frozen. When frozen they have a reported shelf life of one year. The first 10ml fraction is used to give a dose of 1ml per os per cat per day resulting in a daily dose of 100,000 units of interferon. This fraction can be refrigerated normally and will have a shelf life of three weeks.

The owner continues to give 1ml per day alternating the side of the mouth used each day until all the fractions are used. Ideally, treatment lasts for 100 days but longer may be required. After three months, the progress should be reassessed using our Stomatitis Disease Activity Index (SDAI) scoring system. Cats can be rechecked for calici virus carriage in the oropharynx at this time.

Subcutaneous injections

In cases of severe inflammation, or when per os use has failed to provide resolution, the recommended regime is use by subcutaneous injection. The dose is 1-2mu/kg every other day for five doses and repeated after an interval of 21 days. This regime is expensive relative to per os use but likely to be more effective in refractive cases.

Intralesional use

The consensus statement (October 2010) by a group of European specialists indicated *that intralesional treatment is not probably necessary to initiate therapy*. We no longer use this regime routinely but previously, in some very severe cases, an initial treatment total dose of 5 MU injected locally into multiple sites at the junction between healthy gum and a diseased

tissue can provide an initial boost to a treatment course. Using a 10MU vial, enough saline or sterile water is drawn into the syringe to provide a reasonable volume for use - normally 1-2ml depending on area to be injected. The contents are administered in fractions of 0.1 - 0.2ml over the areas inflamed. For severe cases we make 5 injections in each side of 0.2ml each. In less severe cases we concentrate higher volumes into a smaller area.

Reference:

Hennet PR et al: Comparative efficacy of a recombinant feline interferon omega in refractory cases of calicivirus-positive cats with caudal stomatitis: a randomised, multi-centre, controlled, double-blind study in 39 cats. *Journal of Feline Medicine and Surgery* (2011) 13, 577-587

Monitoring the cat's weight, along with a number of other indices as per our standard evaluation forms (SDAI), is a useful objective way of assessing response to treatment. We can supply you with an initial assessment form and one for on-going evaluation.

Note that feline interferon omega should always be stored in the fridge and will remain viable once reconstituted for up to 21 days at 4°C. when used for low dose oral administration – not for injection.