

Small Animal Medicine in Brief

Abstract: Interferon Response in Cats

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Under the supposition that cats suffering from various viral diseases may respond to treatment involving interferon stimulation, tests using Newcastle disease virus (NDV) and polyribonucleoside: polyribocytidylic acid (poly I:C) as stimulators were conducted. Fourteen specific-pathogen-free cats were used in the test. The group tested with NDV showed a significant increase in interferon level six hours after intravenous injection as determined by protection against the cytopathic effect (CPE) of vesicular stomatitis virus in cultures of Crandell feline kidney cells. The NDV stimulation did not produce noticeable toxicity.

The response to poly I:C was not remarkable. Reactions were irregular and large doses were required to reach an effective level of interferon in serum. In cases where large doses were injected, signs of toxicity were evidenced including mucoid diarrhea, weakness, trembling and in some cases death.

Interferon Response in Cats. The Journal of Infectious Diseases 125: 174-177, 1972. Reprint requests to Dr. Bruce McCollough, Dept. of Clinical Pathology, College of Veterinary Medicine, Ohio State University, 1925 Coffey Road, Columbus, Ohio 43210.

The Current Status of the Use of Interferon Inducers in the Prophylaxis and Treatment of Feline Viral Upper Respiratory Disease (Feline Viral Rhinotracheitis)

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Since 1958 when interferon was first described it has been hoped that a potent interferon inducer could be found that would prevent the replication of viruses in host tissues. With this as the goal, a great deal of effort is currently being directed towards finding a suitable intranasal interferon inducer for the prevention of the "cold syndrome" in a number of species.