

Feline and human immunodeficiency viruses (FIV and HIV): Comparative options of treatment

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Abstract

The Human Immunodeficiency Virus (HIV), the etiological agent for the Acquired Immune Deficiency Syndrome and the Feline Immunodeficiency Virus (FIV) are both retroviruses that share a series of resemblances in their viral structure and pathogenic mechanisms.

The clinical studies conducted by physicians, targeted efficient therapies for the control and even for the suppression of AIDS, have been using the animal model as a step for the in vivo research. Although the existence of the monkey's Simian Immunodeficiency Virus was already considered, cats and their FIV infections proved to be far more useful for the antiretroviral medication studies designed for AIDS management.

However, the genetic differences between humans and cats have made it difficult to implement AIDS medication in the treatment of the Feline Immunodeficiency Virus infection. Thereby, whereas in human medicine has been using antiretroviral drugs in the therapy of AIDS/HIV, as well as combinations of 2 or even 3 drugs for the treatment of a single ill individual, veterinary medicine does not benefit from a high level of knowledge for FIV, the studies of possible medication for this disease being stuck at the level of immunomodulators, without having an efficient retroviral medicine implemented in the current therapeutic protocol for FIV.

The present paper wishes to highlight a comparative study between HIV and FIV on the efficiency and toxicity of the antiretrovirals and immunomodulators used in the current practice, knowing that numerous drugs used in the treatment of AIDS are highly inefficient or even toxic when used in cats infected with FIV.

Key words: *HIV, FIV, antivirals, immunomodulators*