"CAT FLU" –
WHICH ORGANISMS PLAY A MAJOR ROLE IN FELINE RESPIRATORY DISEASE?

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Feline respiratory disease is a symptom complex frequently occurring in small animal practice, to which however long time no special attention was given. The recent occurrence of severe and even lethal cases and the current vaccine discussion brings this disease back into focus. Clinical signs can vary between mild sneezing and coughing, conjunctivitis and ulceration of the tongue to severe rhinotracheitis and pneumonia. Most common etiological agents in this disease are Feline Herpes- (FHV) and Feline Calici-Virus (FCV), but also *Chlamydophila felis*, *Bartonella henselae* and *Mycoplasma felis* can play a major role in the localisation and development of the disease. In a study we performed in our laboratory in the year 2006, 68 cats with clinical signs of "cat flu" were testes for the presence of the above agents by polymerase chain reaction (PCR). Of each cat a conjunctival- and a mouth swab were taken. Conjunctival swabs were examined for the occurrence of FHV and FCV, *Mycoplasma felis* and *Chlamydophila felis* and mouth swabs for FHV and FCV, *Mycoplasma felis* and *Bartonella henselae.* All cats were tested for infections with Feline Leukaemia Virus (FeLV) and Feline Immunodeficiency Virus (FIV) by serology. Aim of these study was to find out which organism prevails and whether and how often co-infections arise. Surprisingly and in contrast to other studies none of the mouth swabs and only 1.5% of the conjunctival swabs were positive for FHV, whereas 35.8% of the mouth swabs and 44% of the conjunctival swabs were positive for FCV. In 1.5% of the cases *Chlamydophila felis* was detected in conjunctival swabs and 9% of the mouth swabs were positive for *Bartonella henselae*. More astonishing was the high number of positive results for *Mycoplasma felis* in both conjunctival- (4.5%) and mouth swabs (46.3%). Co-infection with FCV occurred only in eight (mouth) respectively three (conjunctiva) of these cats and only two of the *Bartonella*-infected cats were as well positive for FCV. These results suggest a higher incidence of the non-viral organisms in feline respiratory diseases. Part of this outcome might be the more sensitive diagnostic method by PCR in comparison to culture. Using these methods in a diagnostic screening panel for feline respiratory diseases cannot only be reasonable regarding the therapy of the individual patients; it can be helpful in managing problems in breeding catteries and shelters too.