



IDENTIFICATION OF INFECTIOUS AGENTS IN CATS WITH UPPER RESPIRATORY TRACT DISEASE DURING THE COVID-19 PANDEMIC

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The feline infectious upper respiratory tract disease (URTD), commonly referred as "cat flu", is a disease that causes similar clinical signs in cats to flu or COVID-19 in humans. It is often caused by viruses such as feline herpesvirus (FHV-1), feline calicivirus (FCV), and/or bacteria, including *Mycoplasma felis* (*M. felis*) and *Chlamydophila felis* (*C. felis*). Recently, cases of SARS-CoV-2 infection in felines were reported worldwide, bringing discussions and investigations on the susceptibility of cats to this virus. This study investigated the presence of URTD agents in domestic cats, as well as the potential infection by SARS-CoV-2 in felines with compatible URTD clinical signs. A total of 120 symptomatic cats exposed to positive owners or household members for SARS-CoV-2 within a period of up to 15 days were evaluated. The cats were examined and classified according to the severity and frequency of symptoms, such as sneezing, nasal and ocular discharge, and stomatitis. Three swab samples (nasal, ocular, oral) were collected for detection of common URTD agents and SARS-CoV-2 using PCR. URTD agents were detected in 90 (75%) of the suspected cats, while 30 felines (25%) were negative. *M. felis* infection was the most prevalent (52 cats, 43.3%), followed by FHV-1 (46, 38.3%), FCV (41, 34.1%), *C. felis* (23, 19.16%), and SARS-CoV-2 (1, 0.83%). Most infected cats had coinfections (58, 64.45%). The presence of FHV-1, *M. felis*, and *C. felis* was associated with conjunctivitis (49, 56.97%), while FCV was associated with stomatitis (20, 51.28%). FHV-1 and *M. felis* were most prevalent in cases with rhinitis (78, 70.9%). One feline was identified with SARS-CoV-2, and it also had coinfections with other agents (FHV, *M. felis*). The results highlight the common occurrence of URTD in domestic cats caused by infectious agents, with *M. felis* and FHV-1 being predominant. Despite the presence of SARS-CoV-2 was only detected in one cat, infections by this virus in cats are alarming, and it's recommended that infected owners avoid direct contact with their pets to protect them from potential infections.

Palavras-chave: URTD, Cats, SARS-CoV-2

Apoio: UCS, FAPERGS