Letter to the Editor

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Dear Editor

We read with great interest the article "*Serologic and Urinary PCR Survey of Leptospirosis in Healthy Cats and in Cats with Kidney Disease*"[1]. We agree that reports of leptospirosis in cats are still rare and the role of cats as a source of contamination, as well as the role of leptospires in causing disease in that species might have been underestimated[1].

Leptospirosis in human and dogs is commonly icteric, with acute clinical signs. Therefore, practitioners are familiarized with those symptoms and do not think about leptospirosis on anicteric cases of cats. As a consequence, chronic renal disease determined by that bacterium is often underdiagnosed, by the lack of specific laboratory exams.

In that context, it was with pleasure that we read that paper. The authors not only demonstrated the importance of leptospirosis on chronic renal disease in cats, but also reinforced the usefulness of PCR as an adequate tool to demonstrate it. Cats have been historically considered as refractory to leptospirosis[2], but the adequate usage of molecular tools may change that picture. PCR was shown to be a rapid and definitive diagnosis tool to determine leptospiral DNA in several host species[3], and was successfully employed on a recent study that showed 28.6% of renal carriers in a population of naturally infected stray cats from Reunion Island[4].

Nevertheless, although it is not correct that cats are refractory to leptospirosis, it is possible that they are more susceptible to some serovars than others. The existent reports of serological response on cats usually highlight the low frequency of reactions against members of icterohaemorrhagiae serogroup (mainly serovars Icterohaemorrhagiae and Copenhageni). It is a surprising phenomenon, since on humans and dogs from the same studied regions those serovars are predominant. Thus, it is possible to suggest that cats may be more resistant not to leptospirosis, but particularly to the infection determined by members of icterohaemorrhagiae serogroup, presenting low titers and absence of clinical signs. It could be a biological plausible hypothesis, since cats are major hunters of rodents, which carry Icterohaemorrhagiae. In contrast, reactions against other serogroups, mainly pomona, have been reported on cats[5,6] as well as on wild felids[7], determining acute or chronic infections on those animals.

Although very useful for diagnosing leptospirosis, PCR has an important limitation, since it is gives no information about the infecting serogroup/serovar. In the referred study, although animals were seroreactive against Pomona[1], employing only serology and PCR we cannot be sure about the real infecting serovar. Therefore, the bacteriological isolation of the agent from clinical species remains mandatory for a better understanding of leptospirosis in cats and the real role of those animals on the epidemiology of the infection.

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