CANINE LEISHMANIOSIS DUE TO LEISHMANIA (LEISHMANIA) INFANTUM: CLINICAL ASPECTS AND DISTRIBUTION OF THE DISEASE IN NORTHEASTERN ARGENTINA

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1 Background
Canine leishmaniosis (CanL) is endemic in northwestern Argentina. In 2006, the first autochthonous case was diagnosed in Posadas, Misiones. Here, we describe clinical and epidemiological aspects of this ailment.

2 Methods
Two hundred and eleven dogs suspected of having CanL were surveyed between 2006 and 2016 in several northeastern Argentina cities, particularly in the province of Misiones. Diagnosis was reached through a combination of several methods, the search for amastigotes on smears of bone marrow or lymph node aspirates, PCR, and ELISA using crude extracts or recombinant Leishmania antigens. Criteria recommended by LeishNet were applied for clinical staging. Leishmania species identification was done by applying Low Stringency Single Specific Primer PCR method on DNA templates obtained from the aspirates.

3 Results
One hundred and fifty-three out of 211 dogs (72.5%), were diagnosed as CanL. Seventy-nine of them (51.5%) were females. The average age was 6.5 ± 3.6 years. The most frequent clinical stage was Ila, with 64 cases (41.8%). Patients at this stage displayed moderate disease (abundant clinical signs, presence of anti-Leishmania antibodies and no detectable alterations of kidney function at biochemical level). Stages I, IIb and III were represented by 29 (19%), 25 (16.3%), and 18 (11.7%) dogs, respectively. Only four patients reached stage IV (2.6%). On the other hand, 13 subjects (8.5%) were asymptomatic. Leishmania (L.) infantum is incriminated as the causal agent of CanL in the area, highlighting four cases from Puerto Rico city, and two from Jardín América, in addition to those found in Posadas previously.

4 Conclusions
The predominance of Ila stage indicates that animals are being detected early in the evolution of the disease, thus speeding their inclusion in treatment protocols and therefore their chances of recovery or cure. ELISA serological reactions helped the detection of asymptomatic CanL. The application of a protocol for handling these cases is discussed. Two cities have been added to the geographic distribution area of L. (L.) infantum, suggesting the expansion of this species in the region of Misiones.