Detection of antimicrobial resistant Salmonella enterica strains in samples of ground hedgehogs (Atelerix albiventris) reared as pets in the urban area of Santiago, Chile

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Abstract
The breeding of exotic pets has become a popular practice in Chile and, within this group of animals, small mammals such as guinea pigs and hedgehogs have gained importance due to their docile behaviour. The most common exotic hedgehog species in Chile is the African pygmy hedgehog (Atelerix albiventris). It has been reported that these pets are reservoirs of some zoonotic pathogens, among which Salmonella enterica constitutes an important threat for the owners. This study aimed to detect the presence of Salmonella strains in faeces from hedgehogs (Atelerix albiventris) admitted to a veterinary clinic in Santiago, Chile, and to characterise the antimicrobial susceptibility of the isolated strains. From 200 animals sampled, S. enterica was detected in 5 hedgehogs, corresponding to serotypes Muenchen (2), Infantis (2) and IV43:z4,z23:- (1). Furthermore, phenotypic antimicrobial resistance was determined in all subsp. enterica isolates. These results suggest that in Chile these exotic pets constitute a potential hazard for public health, therefore, supporting educational campaigns about basic biosecurity measures is necessary, mostly aimed at pet owners and risk groups.

Author keywords
Antimicrobial resistance; Chile; Hedgehogs; Salmonella