

Transmission of porcine cysticercosis in Venezuela

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Evidence that active transmission of porcine cysticercosis occurs in Venezuela

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Tropical Animal Health and Production. Volume 42, Number 3 / mars 2010

Abstract

There is a paucity of quantitative data on the status of porcine cysticercosis in Venezuela, information which is essential for understanding the level of disease transmission. This study was, therefore, conducted in a typical small rural community in Yaracuy State, Venezuela, where previous cases of human

Taenia solium

taeniasis/cysticercosis had been reported and where the free-ranging pig management practices and the lack of rudimentary sanitary facilities indicated an obvious risk for transmission of the disease. Serum samples from 52 village pigs were screened by enzyme-linked immunosorbent assays for anti-cysticercal antibodies (Ab-ELISA), using

T. solium

cyst fluid as the antigen and the HP10, monoclonal antibody-based, antigen trapping ELISA for parasite antigen (HP10 Ag-ELISA). Significantly, a high proportion of the animals (65.4% for the Ab-ELISA and 42.3% for the HP10 Ag-ELISA) were sero-positive. Five of the pigs, which were selected on that basis of positive tongue palpation, were killed for autopsy, and large numbers of viable cysticerci were found in the carcasses. This unequivocal documentation of porcine cysticercosis in Venezuelan pigs presents clear evidence that

T. solium

is actively transmitted in Venezuela. Further detailed studies and implementation of appropriate control measures are therefore indicated.

Keywords

Taenia solium

- Porcine cysticercosis - Transmission - Venezuela

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