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## **PUBLIC POLICY FOR CONTROLLING THE TAENIASIS/ CYSTICERCOSIS COMPLEX IN COLOMBIA**

Editorial

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The teniosis/cysticercosis (T/C) complex is a parasitic disease caused by the cestodes *Taenia solium* and *Taenia saginata*, and is considered as a neglected zoonosis by the World Health Organization (WHO) and the Colombian Ministry of Health and Social Protection. (1-3) This parasitic infection is a public health and environmental problem in Latin-American, African and Asian countries, and is currently being introduced to developed countries through immigrant communities. Estimates are that 2 500 000 people are infected with this complex and that twice as many individuals develop the parasite at the tissue level. This disease is associated to 50 000 deaths every year, but these figures need to be updated. (4-8)

The intermediate hosts of the T/C complex are cattle in the case of *T. saginata*, and pigs, dogs and humans in the case of *T. solium*. However, the adult parasite develops only in humans, in whom the tapeworm is found in the small intestine, allowing the viability of its eradication. (4,9) A meta-analysis by Ndimubanzi *et al.* (10) found that neurocysticercosis, a variant that affects the central nervous system, is associated with 29% of epilepsy cases in developing countries. (10)

This issue of Case Reports presents a clinical case of *T. saginata* tapeworm, which is of great importance since its presence continues to be demonstrated in different regions of Colombia, even though few patients attend medical consultation for this cause. This clinical presentation has few signs and symptoms, causes economic losses from infection in cattle, and is most commonly found in Europe. (9)

In Colombia, epidemiological studies have addressed the issue of *T. solium*, determining anti-synthetic antibodies and reporting prevalences in the general population ranging from 0.53% to 40% (11); in a neurological symptomatic population, the highest values

have been found in Cauca (54%) (12). Moreover, neurocysticercosis cases are still being reported. (13,14)

The WHO has set the goal of ensuring a healthy life for people of all ages in developing countries by 2030, but warns that the achievement of this goal is threatened by the T/C complex, as it is transmitted, among others, through water. For this reason, it states that emphasis should be placed on aspects such as ensuring universal health coverage, with the corresponding inclusion of access to quality primary healthcare services and medication in communities living in endemic areas. Similarly, there is a need to support research activities aimed at developing vaccines, increasing funding for the health sector, strengthening early warning capacity and reducing risk factors. (3)

National and international experiences aimed at controlling and/or eliminating the T/C complex have carried out interventions using vaccines against the parasite and massive antiparasitic treatments for humans and swine, providing training on the parasitic infection, and improving pig breeding and surveillance of the parasitosis in pigs at slaughterhouses. However, future programs must have a baseline, link different sectors for interdisciplinary and institutional work and encourage the active participation of the community that is suffering the consequences of this disease (15,16).

In 2018, the Ministry of Health and Social Protection of Colombia presented the National Intersectoral Plan for the Elimination of the Teniasis/Cysticercosis Complex in Colombia 2018-2027 (*Plan Nacional Intersectorial para la eliminación del complejo Teniasis/Cisticercosis en Colombia 2018-2027*). This is a public policy that is expected to be successful and achieve the eradication of this parasitosis through active community liaison and intersectoral and interdisciplinary work with research

groups, entities related to the swine sector and municipal and departmental institutions. (3)

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