

Asian Pacific Journal of Tropical Disease

journal homepage: <http://www.apjtc.com>



Letter to editor <https://doi.org/10.12980/apjtd.7.2017D7-88>

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A bibliometric analysis of global *Angiostrongylus cantonensis* research

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Dear editor,

Angiostrongylus cantonensis (*A. cantonensis*) is a helminth that lives in the pulmonary arteries of two species of rats: *Rattus rattus* and *Rattus norvegicus* and has as intermediary hosts in some species of terrestrial snails[1], which was reported in 1981 for the first time in the American continent. It has extended to the Caribbean Islands and American Continent[2]. This helminth produces the disease known as angiostrongyliasis which may have abdominal complications and even eosinophilic meningitis[3,4].

The proposed objective was to evaluate the international scientific production of *A. cantonensis* until this year. To assess the impact of *A. cantonensis* on scientific reports published globally, a bibliometric analysis was conducted by searching the major publication-indexing databases Medline/Pubmed (using GoPubMed®), Scopus, Science Citation Index (SCI), and SciELO for *A. cantonensis* related content from prominent journals. The articles were recovered using the term “*A. cantonensis*” as the main operator.

A total of 2662 articles were found in our search, of which 973 items were found in PubMed/Medline (6.47% from China, 5.75% from United States, 3.28% from Taiwan and 2.98% from Brazil). Using Scopus, there were 1174 articles (12.77% from Japan, 12.18% from Taiwan and 11.32% from China). Using SCI, there were 469 articles (22.38% from China,

16.20% from Taiwan and 14.92% from the United States). SCI has a total of 4206 citations of his articles referring to *A. cantonensis* with an average of 323.54 citations per year. A search using SciELO retrieved only 36 articles (22 from Brazil, 8 from Cuba, among others). In addition, 3.18% was published in 2012, 6.47% in 2015, 11% in 2016 and 11.94% in 2013 respectively, in which most publications were in 2013 (Figure 1).

In this study, we can appreciate the high scientific productivity in this helminth, which implies a high knowledge about the parasite, which suggests that it is possible to prevent the disease caused by itself and teach the risk populations how to prevent the reproduction of the parasite. It is important to consider that the research has demonstrated the leading role that China, Taiwan, the United States and Japan play in *A. cantonensis* research.

Latin American has a low scientific production in this helminth even taking into account that their vectors is distributed widely in the continent[5]. The countries that have some scientific production in this issue are Brazil and Cuba in comparison with others. It is important the synthesis of the articles found in search engines in guides and manuals of easy learning to achieve prevention in populations at risk, stopping the life cycle of this helminth.

Currently human activities, mainly industrialization, have

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The journal implements double-blind peer review practiced by specially invited international editorial board members.

Article history:

Received 4 May 2017

Received in revised form 12 May 2017

Accepted 15 Jun 2017

Available online 6 Jul 2017

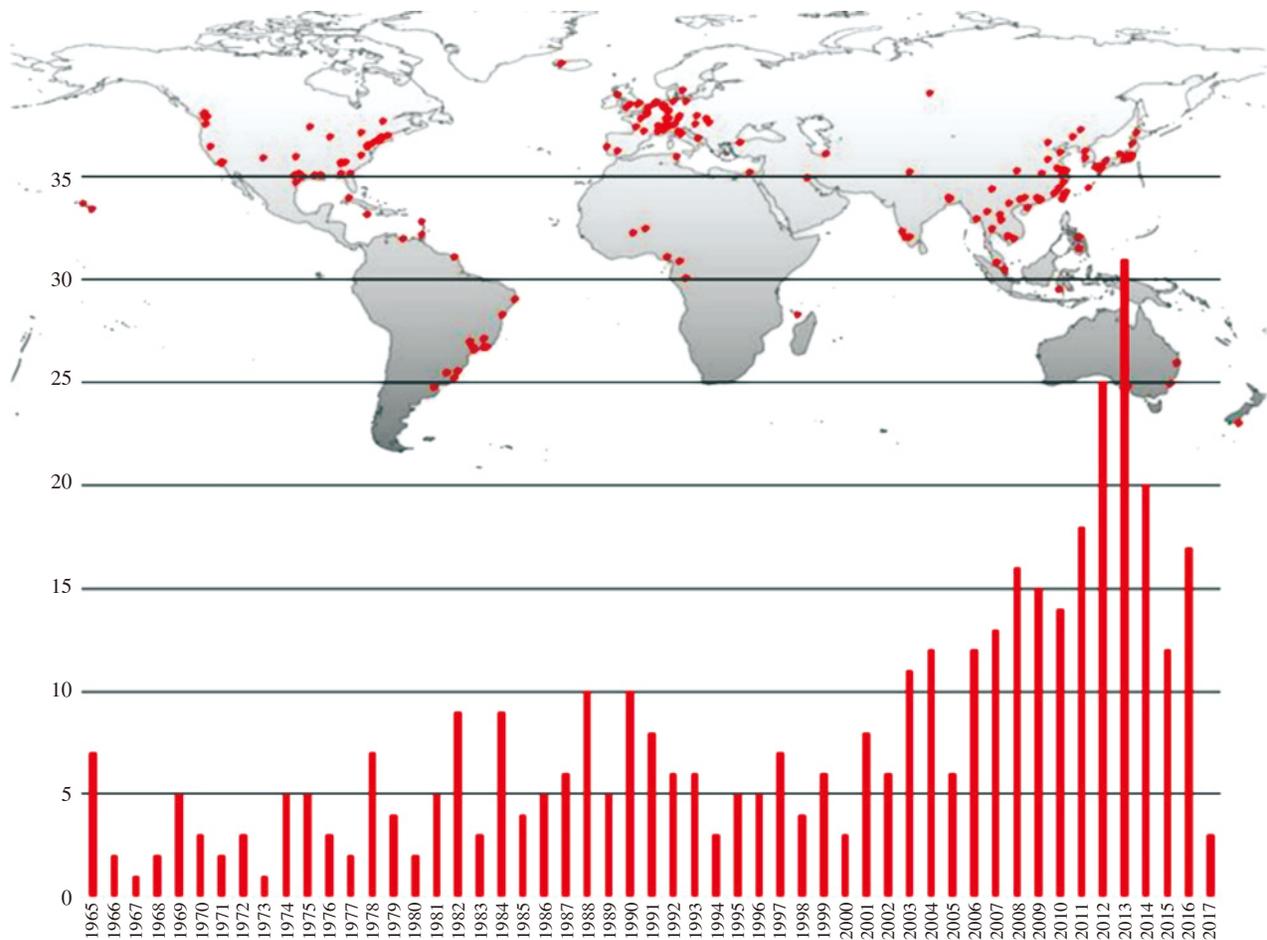


Figure 1. Trends in time of publication on *A. cantonensis*, 1965–2017 (Source: from GoPubMed®).

produced direct changes in the environmental conditions and in the quality of water, soil, air and food that favor this parasite. It must be taken into account that the people affected by this parasite are usually of limited economic resources, always determined the infection by the sanitary conditions[6].

In conclusion, we can appreciate a high bibliometric scientific production on *A. cantonensis*, which denotes the great study around this parasite, however it is essential to continue educating the population in general for the prevention and reduction of cases of infestation.

Conflict of interest statement

We declare that we have no conflict of interest.

References

- [1] Padilla-Docal B, Iglesias-González I, Bu-Coifíu-Fanego R, Socarrás Hernández CA, Dorta-Contreras AJ. Review: intrathecal activation as a typical immune response within the central nervous system in angiostrongyliasis. *Am J Trop Med Hyg* 2013; **88**(2): 230-5.
- [2] Pincay T, García L, Narváez E, Decker O, Martini L, Moreira JM. Angiostrongyliasis due to *Parastrongylus* (*Angiostrongylus*) *cantonensis* in Ecuador. First report in South America. *Trop Med Int Health* 2009; **14**(2): 37.
- [3] Abrahams-Sandí E. [Abdominal angiostrongyliasis: notes on the diagnosis]. *Rev Biomed* 2007; **18**: 37-45. Spanish.
- [4] Moreira VLC. Endemic angiostrongyliasis in the Brazilian Amazon: natural parasitism of *Angiostrongylus cantonensis* in *Rattus rattus* and *R. norvegicus*, and sympatric giant African land snails, *Achatina fulica*. *Acta Trop* 2013; **125**: 90-7.
- [5] Gutiérrez Gregoric DE, Beltramino AA, Vogler RE, Rumi A. [Range expansion of *Achatina fulica* Bowdich, 1822 (Gastropoda) in Argentina and its concordance with predictive models]. *Amici Molluscarum* 2013; **21**(1): 17-21. Spanish.
- [6] Grenier G, Rodríguez G. [Frequency of intestinal parasitosis in the population of Los Cocos neighborhood, Sucre municipality, Aragua state, Venezuela. Years 2005–2006]. *EnfInfMicrobiol* 2008; **28**(1): 6-12. Spanish.