

Seroprevalence of anti-*Toxoplasma gondii* IgG and IgM in patients from the metropolitan region of Natal, Rio Grande do Norte, Brazil.

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Abstract

Toxoplasmosis is a zoonosis that is characterized by being a disease of wide geographic diversity and of hosts, including several species of mammals and birds. Prevalence studies point to a high number of infected, both in humans and in animals, however, the severe phase of this disease does not present in the same proportion. In most cases, *T. gondii* is asymptomatic and in some cases can cause serious damage to the individual, especially in newborns and immunosuppressed individuals. A descriptive study was carried out in the population of the metropolitan region of Natal (Brazil). 400 samples of blood material (plasma) were collected in the period from 05/20/2016 to 06/23/2016. Serum titers of immunoglobulins, IgG and IgM anti-*T. gondii*, were measured by the electrochemiluminescent technique (ECLIA) in a Cobas e411. Seroprevalence of anti-T IgG. *Gondii* was 65% and in 35% the samples showed absence of this immunoglobulins. For IgM, 0.75% of the samples presented seroprevalence, indicating the presence of the acute phase of the disease. As far as the epidemiological profile of the population is concerned, 54% of the analyzed samples are among patients between the ages of 23 and 32, 90.75% are female, 27% have completed high school and 66.5% live in Places that do not have basic sanitation. The high prevalence of IgG can be attributed to the quality of the water and, consequently, to foods that are in contact with it, although 67% of the patients affirm knowing the disease, but not knowing about prevention.

Table

Tabela 1 - Table 1 - Frequency of anti-toxoplasma IgG and IgM in blood plasma of patients using electrochemiluminescence.

	ECLIA			
	IgG+	IgG -	IgM+	IgM-
Frequency	260	140	3	397

Recent Publications

1. Dubey, J. P.; Beattie, C. P. Toxoplasmosis of animals and man. Boca Raton: CRC Press, 1988. p. 220.
2. Kamazoe U. *Toxoplasma gondii* In: Neves DP. Parasitologia Humana. 8ed., págs164-176, São Paulo: Ateneu, 1991.
3. Lopes AP, Dubey JP, Moutinho O, et al. Seroepidemiology of *Toxoplasma gondii* infection in women from the North of Portugal in their childbearing years. *Epidemiol Infect.* 2012;140(5):872-7. Epub 2011 Aug 31.
4. Pardini, H. 2001. Toxoplasmose - Diagnóstico Laboratorial - Instituto de Patologia Clínica, págs1-6.
5. Fond, G. et al. 2013. "[*Toxoplasma Gondii*: A Potential Role in the Genesis of Psychiatric Disorders]." *L'Encéphale* 39(1): 38-43. <http://dx.doi.org/10.1016/j.encep.2012.06.014>5Cnhttp://www.ncbi.nlm.nih.gov/pubmed/23095600.



Biography

He holds a bachelor's degree in Biological Sciences from the Federal University of Rio Grande do Norte (2004) and a master's degree in Health Sciences from the Federal University of Rio Grande do Norte (2013). He is currently an effective professor at the Federal Institute of Education, Science and Technology of Rio Grande do Norte. Has experience in the area of Botany, with emphasis on biotechnology, and parasitology working mainly on the following topics: epidemiology, collective health and enteroparasites.

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