The prevalence of multiple sclerosis in the city of Santos has remained unaltered for five years

A prevalência de esclerose múltipla na cidade de Santos permaneceu inalterada por cinco anos

Yara Dadalti Fragoso^{1,2}, Joseph Bruno Bidin Brooks^{1,2}

Correspondence: Yara Dadalti Fragoso; Departamento de Neurologia, Universidade Metropolitana de Santos; Rua da Constituição 374; 11015-470 Santos SP - Brasil; E-mail: yara@bsnet.com.br

Conflict of interest: There is no conflict of interest to declare.

Received 20 February 2012; Accepted 28 February 2012.

Dear Editors.

We are writing in relation to the recent and excellent work by Lana-Peixoto et al., published in this journal in February 2012¹. The authors reviewed Brazilian studies on the prevalence of multiple sclerosis (MS), taking into consideration the results from São Paulo (two surveys)^{2,3} and Botucatu (one survey)⁴. Given that these surveys were not limited to hospital-based and MS center data, Lana-Peixoto et al. considered these surveys were appropriate for reference purposes. Furthermore, they mentioned that these selected studies were suitable for expansion to include similar populations of individuals. Indeed, Brazil is a large country with a wide variety of ancestry backgrounds among patients.

We would like to add to the discussion. In 2005, the first study on the prevalence of MS in the city of Santos (SP) was carried out strictly in accordance with BCTRIMS guidelines⁵. That study showed that the prevalence of MS in Santos city was 15.54 cases per 100,000 inhabitants. Five years later, the study was repeated using exactly the same method and the prevalence was 15.50 cases of MS per 100,000 inhabitants. Although the seven-year interval between the two studies in São Paulo yielded prevalence that was three times higher in the second study (1997)³ than in

the first study (1990)2, the same effect was not observed in Santos, where the prevalence seems to have remained stable. When patients from 20055 and 2010 were compared, it was clear that nine new cases had appeared in our survey, while eight patients from the initial survey had moved away or died. Population growth over this period accounted for the present value of 15.50/100,000. Another interesting point to take into consideration is that Santos has very similar population and characteristics to São Paulo, Botucatu, and Belo Horizonte, except for the altitude. In 2010, Santos had 419.757 inhabitants (2005 = 418,316 inhabitants), comprising mainly Caucasians (72%), and people of mixed African origins (22%). The literacy level is high, reaching 96.6%. The city is located at latitude 23°57'35" S, longitude 46°19'56" W, and its mean altitude is 10 m above sea level. It has a typically tropical transitional coastal climate, with an average annual temperature of 20° C and average annual rainfall of 1,500 mm. It is therefore possible that, for the populations of the four cities in question, the narrow range in the numbers of MS cases, from 15 to 18 cases per 100,000 inhabitants, is indeed a very reliable value.

We thank Lana-Peixoto et al. for creating the opportunity for us to present our results and we hope that this has enriched the discussion on the prevalence of MS in Brazil.

References

- Lana-Peixoto MA, Frota ERC, Campos GB, Monteiro L., The Brazilian Committee for Treatment and Research in Multiple Sclerosis. The prevalence of multiple sclerosis in Belo Horizonte, Brazil. Arq Neuropsiquiatr 2012;70:102-107.
- Callegaro D, Lolio CA, Radvany J, Tilbery CP, Mendonça RA, Melo AC. Prevalence of multiple sclerosis in the city of São Paulo, Brazil in 1990. Neuroepidemiology 1992;11:11-14.
- 3. Callegaro D, Goldbaum M, Tilbery CP, et al. The prevalence of multiple
- sclerosis in the city of São Paulo, Brazil, 1997. Acta Neurol Scand 2001;104;208-213.
- Rocha FC, Herrera LC, Morales RR, The Brazilian Committee for Treatment and Research in Multiple Sclerosis. Multiple sclerosis in Botucatu, Brazil. A population study. Mult Scler 2002;8(Suppl):S41-S42.
- Fragoso YD, Peres M. Prevalence of multiple sclerosis in the city of Santos, SP. Rev Bras Epidemiol 2007:10:479-482.

¹Department of Neurology, Universidade Metropolitana de Santos (UNIMES), Santos SP, Brazil;

²Multiple Sclerosis Reference Center for the Coastal Region of the State of São Paulo, Santos SP, Brazil.