https://doi.org/10.1590/0004-282X20190102

Reply

Resposta

Roberta Paiva Magalhães ORTEGA¹, Sérgio ROSEMBERG^{1,2}

Dear Editor,

We thank Finsterer et al.¹ for their interest in our paper. However, we think that their concerns have missed the target. The main purpose of our study was to call the attention of child neurologists and pediatricians to the difficulties in making the diagnosis of hereditary spastic paraplegia (HSP) in children for the reasons largely explained in the manuscript. This objective is explicit in the title: Hereditary spastic paraplegia: a clinical and epidemiological study of a Brazilian pediatric population². How does one make this diagnosis in patients in whom a genetic study cannot be performed? Moreover, it is known that in one-third to half of the patients, the genetic results are negative^{3,4,5}. Should we exclude the diagnosis? These concerns are highly surprising when it appears that two of the authors of the letter work in an official Brazilian institution. Surely they are aware of the difficulty of performing genetic studies, most of which are still unaffordable, in our population.

It is true that extrapyramidal signs were the second most frequent abnormality in our cohort of complicated HSP. However, they were encountered in only six patients, this being the reason that they were not fully described. We agree that they could have been listed in Table 2. Treatment was beyond the scope of our study.

As for their disagreement with the statement that "It is known that there are mutations in genes such as ATL1 (SPG3A) and BSCL2 (SPG17) responsible for either HSP or *Charcot-Marie-Tooth disease*", we suggest a careful review of the following manuscripts:

• Timmerman, Vincent; Clowes, Virginia E; Reid, Evan. Overlapping molecular pathological themes link Charcot-Marie-Tooth neuropathies and hereditary spastic paraplegias. Experimental Neurology 2013; 246:14-25⁶.

• Guo-hua Zhao and Xiao-min Liu. Clinical features and genotype-phenotype correlation analysis in patients with ATL1 mutations: A literature reanalysis. Translational Neurodegeneration 2017; 6:9⁷.

Finally, the authors say that they do not agree with our statement: "Over 70 distinct loci and over 50 genes have been identified..." because according to them "...at least 79 loci and at least 60 genes have been identified...". We think that this concern does not deserve a response and leave to the judgment of the readers the purpose of such a concern. The same argument may be applied to their proposition to revise our statement: "pure HSPs are usually autosomal dominantly inherited and that complex HSPs are usually autosomal recessively transmitted", when according to them "...<u>only</u> 70-90% of the pure HSPs follow an autosomal dominant trait and about 20% of the pure HSPs follow an autosomal recessive trait."

Roberta Paiva Magalhães Ortega Sérgio Rosemberg

(cc) BY

References

- Finsterer J, Scorza FA, Scorza CA. Letter to the Editor. Arq Neuropsiquiatr. 2019 Aug;77(8):597. https://doi.org/10.1590/0004-282X20190090
- Ortega RPM, Rosemberg S. Hereditary spastic paraplegia: a clinical and epidemiological study of a Brazilian pediatric population. Arq Neuropsiquiatr. 2019 Jan;77(1):10-8. https://doi.org/10.1590/0004-282X20180153
- Koul R, Al-Murshedi FM, Al-Azri FM, Mani R, Abdelrahim RA, Koul V, Alfutasi AM. Clinical spectrum of hereditary spastic paraplegia in children: a study of 74 cases. Sultan Qaboos Univ Med J. 2013 Aug;13(3):371-9. https://doi.org/10.12816/0003258
- 4. Kara E, Tucci A, Lynch DS, Elpidorou M, Bettencourt C, Chelban V, et al. Genetic and phenotypic characterization of complex

hereditary spastic paraplegia. Brain. 2016 Jul;139(Pt 7):1904-18. https://doi.org/10.1093/brain/aww111

- Schüle R, Wiethoff S, Martus P, Karle KN, Otto S, Klebe S, et al. Hereditary spastic paraplegia: clinicogenetic lessons from 608 patients. Ann Neurol. 2016 Apr;79(4):646-58. https://doi.org/10.1002/ana.24611
- Timmerman, Vincent, Clowes, Virginia E, Reid, Evan. Overlapping molecular pathological themes link Charcot–Marie–Tooth neuropathies and hereditary spastic paraplegias. Exp Neurol. 2013 Aug;246:14-25. https://doi.org/10.1016/j.expneurol.2012.01.010
- Zhao GH, Liu XM. Clinical features and genotype-phenotype correlation analysis in patients with ATL1 mutations: a literature reanalysis. Transl Neurodegener. 2017 Apr 4;6:9. https://doi.org/10.1186/s40035-017-0079-3

¹Irmandade da Santa Casa de Misericórdia de São Paulo, São Paulo SP, Brasil; ²Faculdade de Ciências Médicas da Santa Casa de São Paulo, São Paulo SP, Brasil.

Sergio Rosemberg D https://orcid.org/0000-0001-8843-8557; Roberta Paiva Magalhaes Ortega D https://orcid.org/0000-0003-4323-7916 Correspondence: Roberta Paiva Magalhães Ortega; Rua Cesário Motta Júnior, 112 – Vila Buarque; 01221-020 São Paulo SP, Brasil; E-mail: romagalhaes@hotmail.com Conflict of interest: There is no conflict of interest to declare.

Received 01 August 2019; Accepted 08 August 2019.