Comment on Clinical Profile of Genetically Proven Huntington's Disease Patients From Eastern India

We read with great interest in the manuscript by Hussain *et al.*^[1] about clinical profile of Huntington's disease (HD) in India, and we would like to contribute with a still unpublished data, of an ongoing study of a Brazilian cohort, with very similar founds.

We evaluated 36 patients with a genetic diagnosis of HD in a tertiary hospital in southern Brazil, with the objective of assessing the symptoms of HD at the onset. Among the total number of patients evaluated, 52.77% were male, and the age of onset ranged from 21 to 76, with a mean of 44.99 ± 9.96 years old. Also, out of the total, 25 patients had chorea as the initial presentation, two presented as ataxia, one had Parkinsonism, two had tics, one had dystonia, three had psychiatric or behavioral changes, and two cognitive symptoms [Table 1].

In our study, the paternal transmission was also commoner, especially in the non-choreic group, but the rate of *de novo* mutation was low, with only two patients.

The genetic expansion cytosine-adenine-guanine (CAG) ranged from 29 to 56 (mean 42.92 \pm 4.26). These data bring us another interesting finding, a 29 CAG expansion length patient. But, different from your article, this patient was not excluded, since there is growing evidence of patients with less than 35 CAG repeats presenting a classic phenotype of HD.^[2-5] For this reason, we understand that an update of the current guidelines for HD testing is on the way.

Also, a difference between our studies was that we only included patients older than 20 years, aiming not to include patients with Juvenile Huntington's disease (JHD) phenotype, and try to reduce possible biases by analyzing phenotypes of a group in which it is known to have a higher incidence of atypical presentations.

Since the motor impairment and the cognitive and psychiatric changes are subtle, it is often difficult to state the exact point at which the disease starts its development. Still, it is very hard to correlate cognitive and psychiatric features to HD, but as *Movement Disorder Society Task* *Force* has described, nonmotor signs should be considered in the manifest HD diagnosis criteria, in addition to motor features.^[6]

Both the rate in this study and the rate reported by Hussain *et al.* of nonmotor presentation of HD are higher than have been reported by literature, but, however, there are few studies whose reported data are similar to these.^[7,8] Most studies were focused on motor symptoms, even choreic or non-choreic. In this study, non-choreic presentations were also higher than previously reported studies.^[9,10]

In fact, all of these represent greater acceptance of nonmotor symptoms as a form of manifestation of HD, and it is reasonable to suppose that when cognitive, psychiatric and behavioral aspects are assessed together with motor signs, it may result in a slightly earlier diagnosis of HD; this is how important the data is.

As in India, there are no epidemiological studies regarding HD in Latin America, and studies capable of grouping so much information about the disease are even more important. In this way, recognizing atypical manifestations in HD is of paramount importance to prevent misdiagnosis, reason why we congratulate the authors on their research efforts in performing this study.

Availability of data and materials

All data generated or analyzed during this study are included in this published article.

Ethics approval and consent to participate

The study was approved at the ethics committee by number: CAAE 67130217.1.1001.0096. Written informed consent for participating in this study was obtained from all patients.

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Conflicts of interest

There are no conflicts of interest.

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Table 1: Comparison of patient characteristics based on the initial clinical manifestation					
	Total (<i>n</i> =36)	Initial clinical manifestation			
		Chorea (<i>n</i> =25)	Other movement disorder $(n=6)$	Psychiatric (n=3)	Cognitive $(n=2)$
Gender (M/F)	19/17	16/9	3/3	1/2	0/2
Age of first manifestation	42 (21-76)	46 (21-76)	44 (35-66)	40 (31-67)	43 (36-50)
Inheritance (P/M)	20/14	10/14	4/1	2/1	2/0
Repeat length	40 (29-56)	42 (29-56)	44 (40-45)	39 (36-44)	41 (39-44)

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