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LETTER TO EDITOR

Tremors as an Atypical Presentation of Cervical Myelopathy?

Dear Editor,

I read with great interest the article by Goh and Yoong-Leong, in which they report an atypical elderly patient presenting with limb tremor that was associated with cervical myelopathy.[1] However, there may be some points to be further discussed for a better understanding of the manuscript as well as avoiding misleading conclusions.

A critical point was that there was no data regarding the laboratory findings of the patient or medication history at the term of admission. One of the most common subtypes of tremor in the elderly is enhanced physiological tremor.[2] Remarkably, it is known that this kind of tremor can easily be produced by usage of several medications, some hormonal and metabolic disturbances (hypoglycemia, hyperthyroidism, etc.), and psychogenic disturbances. Of note, this type of tremor which is relatively large amplitude, and very apparent tremor, disappears following the termination of these inducer circumstances.[3] Hence, a crucial limitation may be that tremor seen at the time before surgery might be related to another temporary inducer which has been rather established to be an etiology of tremor, as mentioned above.[3] Therefore, I wonder if the authors might include data regarding the laboratory findings and medication usage in detail at the admission of the patient.

Second, it is remarkable to state that the phenomenology of the tremor was not defined in detail, which is certainly crucial for a better understanding of the report as well as responsible pathophysiology. They describe both resting and action tremors but do not include other data such as its amplitude, frequency, and if it was rhythmic or arrhythmic in the case report section. Besides, they also state that the patient could not perform tandem gait due to his unsteadiness. I wonder by which mechanisms they explain this gait disturbance. Was it is in the form of cerebellar ataxia or sensorial ataxia or a spastic gait due to impairment of the corticospinal tract? The precise definition of these additional manifestations should be included in the text by the reason of that knowledge of these accompanying manifestations is important when interpreting the occurrence and possible pathophysiology of tremor in this patient. Taken together, we think that while illustrating such an atypical presentation and associating this with cervical myelopathy, even video-polymyography recording is unavailable, detailed description of the phenomenology of tremor is essential which was absent in this manuscript. This is certainly important when discussing the possible mechanisms of tremor in this atypical patient. Such that, if it is corresponding to enhanced physiological tremor, it can be hypothesized that cervical myelopathy might have led to the enhancement of psychological tremor (of course after excluding other types of etiologies). If it is corresponding phenomenologically to rubral tremor, we might discuss the possible disturbances of cerebello-rubrospinal system as the responsible mechanism of tremor.

Finally, we would like to state that the literature evidence on this aspect is strictly rare as also mentioned by the authors. In the unique report by Fraix *et al*. (also referred by Goh and Yoong-Leong), a 46-year-old male patient presenting with a kinetic tremor of the unilateral upper limb was described.[4] However, after performing accelerometric and electromyography investigations, they preferred to describe the manifestation as action-induced clonus mimicking tremor. Besides, no recovery was achieved after surgery in that patient. Therefore, Goh and Yoong-Leong should be very meticulous when suggesting conclusions based on this unique presentation, which has actually no literature support. Taken together, we think that future reports including a large number of patients are surely warranted before suggesting tremor as a potential manifestation of myelopathy.

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Conflicts of interest

There are no conflicts of interest.

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