

Commentary: Is There an "Acquired Idiopathic Head-Shaking Nystagmus?": A Discussion of Mechanisms and Clinical Implications Based on a Case Report

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Lee S-U and Kim J-S (2022) Commentary: Is There an "Acquired Idiopathic Head-Shaking Nystagmus?": A Discussion of Mechanisms and Clinical Implications Based on a Case Report. Front. Neurol. 13:955081. doi: 10.3389/fneur.2022.955081 We read the article by Filippopulos and his colleagues with great interest (1). This report described a patient with recurrent episodes of vertigo prompted by fast head movement (1). The vertigo was accompanied by a severe right-beating head-shaking nystagmus (HSN) with an increased time constant of 60 s. Despite scrutinized neurotologic and radiologic evaluation, there was no evidence of peripheral or central vestibulopathy, except prominent HSN. The patient had no prior history or subsequent development of any associated symptoms during the 6 years of follow-up, which may exclude the diagnosis of vestibular migraine, Meniere's disease, or vestibular paroxysmia. The authors insisted that this patient represents a distinct clinical entity with an unstable velocity storage mechanism (VSM), thereby assigning a new disorder termed "acquired idiopathic head-shaking nystagmus" (aiHSN).

As the authors noted, we previously reported a group of patients with recurrent spontaneous vertigo with interictal HSN (BRV-HSN) in the absence of peripheral vestibulopathy as was documented by caloric, head-impulse, or rotatory chair tests. Even though we could not assess HSN in those patients with BRV-HSN during the attacks, the only difference between the BRV-HSN and aiHSN appears to be the absent HSN between the attacks in aiHSN. Given the (1) increased time constants of the HSN and rotatory nystagmus, (2) emergence of the HSN even with a short duration of head-shaking, and (3) good responses to baclofen, we proposed that unstable and asymmetric VSM may be the cause for vertigo and BRV-HSN (2). Apparently, the characteristics of HSN observed in the patient reported by Filippopulos et al. (1) do not seem to differ from those observed in our patients with BRV-HSN. Thus, the BRV-HSN and aiHSN may lie on the same spectral line due to a common pathomechanism (unstable and asymmetric VSM), rather than distinct disease entities. In addition, the clinical presentation does not escape from the umbrella term of BRV.

AUTHOR CONTRIBUTIONS

S-UL analyzed and interpreted the data and wrote the manuscript. J-SK designed and conceptualized the study, interpreted the data, and revised the manuscript. Both authors contributed to the article and approved the submitted version.

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