Functional (psychogenic) saccadic oscillations and oculogyric crises – Authors' reply

Dear Editor

We read with interest the publication by Baizbal-Carvallo & Jankovich [1] which they highlight in their letter. We were intrigued that 7 of the 11 patients with ophthalmologic movement disorders had 'psychogenic oculogyric crises', 5 had 'psychogenic opsoclonus, and 1 patient had 'psychogenic flutter' (previously termed "voluntary nystagmus" in the literature), but none had convergence spasm, which has been reported to be the most prevalent psychogenic eye movement disorder [2]. Since our original review on this subject [3], we have retrospectively assessed a cohort of 817 patients attending two different specialist neuro-otology clinics in London, UK, across 2 years. We identified 15 patients with functional (psychogenic) eye movement disorders; 53% of these had convergence spasm, 33% a functional (psychogenic) gaze limitation, and 1 patient "functional (voluntary) nystagmus". None of our patients had oculogyric crises, or opsoclonus, although we have seen these in the context of functional movement disorders in our practice [3]. As expected given the nature of our "dizzy" clinics (one secondary/tertiary, and another tertiary/quaternary referral clinic), we found a prevalence of 1-4% of functional eye movements, which is lower than the 6% seen in a movement disorders clinic [1].

In addition, in their letter Baizbal-Carvallo & Jankovich [1] raise two semantic points; firstly, that the term "voluntary nystagmus" and "functional nystagmus" are perhaps better termed "psychogenic or functional saccadic oscillations and oculogyric crises" given the absence of slow phases (that characterise nystagmus) during these ocular movements. We agree that the eye movements during "voluntary (or functional) nystagmus" are saccadic oscillations, but are unsure as to the clinical utility of challenging a terminology that is well established in the neurological and neuro-ophthalmological literature. More importantly, "voluntary nystagmus" *cannot* fall under the term "oculogyric crisis" as the latter consist of a tonic deviation of the eyes, not oscillations.

Secondly, the authors highlight the 'lively' debate as to whether such movements should be termed psychogenic or functional, and we agree that there are pros and cons to both. We are open to the use of either term, and indeed there are clinical settings and individual situations in which one may be preferable to another – for example, where there is a clear psychological trigger to a movement disorder the term psychogenic may be most appropriate; but when there is no identifiable psychological cause, the patient is accepting of the diagnosis, and symptoms are interfering with everyday activities, the term functional may be more suited.

1. Baizabal-Carvallo JF, Jankovic J. Psychogenic Ophthalmologic Movement Disorders. The Journal of neuropsychiatry and clinical neurosciences. 2016: appineuropsych15050104.
2. Fekete R, Baizabal-Carvallo JF, Ha AD, Davidson A, Jankovic J. Convergence spasm in conversion disorders: prevalence in psychogenic and other movement disorders compared with controls. J Neurol Neurosurg Psychiatry. 2012; **83**(2): 202-4.
3. Kaski D, Bronstein AM, Edwards MJ, Stone J. Cranial functional (psychogenic) movement disorders. Lancet Neurol. 2015; **14**(12): 1196-205.