

**In Response To:**

Ha J, Na BS, Ahn JH, Kim M, Kim JW, Lee JH, et al. Anti-CV2/CRMP5 paraneoplastic chorea effectively managed with intravenous amantadine. *Tremor Other Hyperkinet Mov.* 2019; 9. doi: 10.7916/tohm.v0.701

## Letters

**Paraneoplastic Chorea Managed with Intravenous Amantadine**

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To the Editor,

We have read the article entitled ‘Anti-CV2/CRMP5 paraneoplastic chorea effectively managed with intravenous amantadine’ with great interest.<sup>1</sup> We would like to congratulate the authors for this unique case report and make some suggestions.

In the case report, there was decreased radionucleotide uptake on an fluoropropyl-2β-carbomethoxy-3β-(4-iodophenyl)nortropane (FP-CIT PET) scan of the bilateral striatum that corresponded to severe atrophy and increased T2 signal on the magnetic resonance imaging (MRI) of the brain. This finding on FP-CIT PET imaging is expected given the structural abnormalities observed while conducting the MRI of the brain and therefore adds little diagnostic value. FP-CIT PET and other dopamine transporter (DaT) scan techniques are approved to only differentiate essential tremor from neurodegenerative disorders.<sup>2</sup> An abnormality on structural imaging will always give false-positive results on positron emission tomography (PET) or single-photon emission computerized tomography (SPECT) and can lead to diagnostic confusion.<sup>3</sup> There are many examples in literature of structural imaging abnormalities in the striatum with corresponding decreased uptake while using DaT scan techniques.<sup>4–8</sup> It is important to stress that obtaining DaT scan imaging on a routine basis in patients diagnosed with structural abnormalities in the striatum upon conducting MRI is generally not indicated and can expose patients to unnecessary risk.

It should also be noted that there is some radiation exposure when a patient undergoes a DaT SPECT scan or PET scan. This can potentially increase the risk of cancer, especially in the elderly population.<sup>9</sup>

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