

Comment on: Hemidystonia caused by frontal cortical infarction

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Dear Editor-in-Chief,

I carefully read the case report from Miletic and Blazina published in *Acta Neurological Belgica* [1]. The authors report the story of a 71-year-old woman presenting with a right-sided hemidystonia following a left frontal ischemic stroke.

To support their anatomico-clinical correlation between stroke and dystonia, Miletic and Blazina show an axial image of the brain obtained at the level of the superior frontal sulci using computed tomography (Fig. 1a). A cortical and juxta-cortical hypodense area can be clearly visualized in the left hemisphere. The authors tentatively localize this acute ischemic lesion in the frontal lobe.

I disagree with the author's localization of this hypointense area. In my opinion, this abnormality mainly projects on the left postcentral gyrus, in the parietal lobe. Several anatomical landmarks support my interpretation. The CT image easily allows localizing the caudal portion of the left superior frontal sulcus that terminates on the precentral sulcus and the anterior bank of the precentral gyrus. Yet, the hypointense area shown on the CT image clearly lies caudally to the posterior bank of the precentral gyrus. Furthermore, Yousry et al. [2] proposed consistent anatomical landmarks of the precentral gyrus. One of these landmarks on axial slices is the omega shape of the hand representation area, which can be clearly seen on the CT image presented by Miletic and Blazina. Again, the hypodense area projects

caudally to this landmark, involving the postcentral gyrus. Altogether, we have to conclude that the hypodense cortical area shown on Fig. 1a lies in the rostral portion of the parietal lobe. A causal relationship between a right-sided dystonia and an anatomical lesion involving the left postcentral gyrus would provide further evidence supporting the role of disturbed sensory processing in the pathophysiology of dystonia [3].

Sincerely,
Prof. Gaëtan Garraux, MD, PhD

Compliance with ethical standards

Conflict of interest The author declares no conflict of interest.

Ethical approval This manuscript does not contain any studies with human participants or animals performed by the author.

Informed consent For this type of study formal consent is not required.

References

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