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Teaching NeuroImages: Unilateral prosopometamorphopsia as a dominant hemisphere-specific disconnection sign

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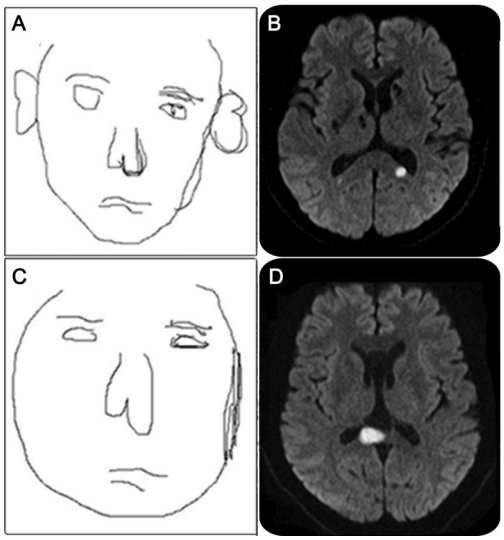
Figure Drawings of facial features as described by the patients, along with the patients' brain MRIs



(A) This figure was drawn based on the first patient's statement. (B) Diffusion-weighted MRI of the first patient demonstrated infarction in the left splenium with a tiny focus on the right side. (C) This figure was drawn according to the second patient's statement. (D) Brain MRI of the second patient showed infarction in the right splenium of the corpus callosum.

We report 2 patients who complained that the left half of faces appeared distorted. A 58-year-old right-handed woman explained that although the left side of the face was clearly visible, it appeared distorted "like a monster." The left eye looked elongated toward the left ear, while the nose appeared to be bent toward the left cheek, and the mouth toward the chin. She did not have any dyslexia in the left or right visual field. A 53-year-old right-handed man described that the left eyelid of people looked swollen as if they had undergone "failed eyelid surgery," while the nose appeared to be bent downward and the left facial outlines either bulged or writhed. This was the same with pictures of others, but was absent with objects. He did not show hemialexia, color anomia, or optic aphasia. Brain MRIs showed splenial infarctions (figure). The prosopometamorphopsia in the right hemifield was likely caused by the disruption of the pathway from the left occipital area to the right hemisphere. Unilateral prosopometamorphopsia could be a dominant hemisphere–specific disconnection sign in which neurologic abnormalities are observed in the ipsilateral side of the dominant hemisphere.[1] Our cases provide additional evidence that the splenium of the corpus callosum interconnects visual cortices and the right hemisphere is dominant for integrating facial information.[2]

REFERENCES

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