Unilateral Upper Cervical Posterior Spinal Cord Infarction Caused by Spontaneous Bilateral Vertebral Artery Dissection

Author(s):
Fubing Ouyang, MD, PhD; Jiaoxing Li, MD, PhD; Huixing Zeng, MD; Meng Wang, MD, PhD; Yuhua Fan, MD, PhD

Corresponding Author:
Yuhua Fan, fanyuhua@mail.sysu.edu.cn

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Affiliation Information for All Authors: 1. Department of Neurology, The First Affiliated Hospital, Sun Yat-sen University; Guangdong Provincial Key Laboratory for Diagnosis and Treatment of Major Neurological Diseases, National Key Clinical Department and Key Discipline of Neurology, No.58 Zhongshan Road 2, Guangzhou, 510080, China; 2. Department of Radiology, The First Affiliated Hospital, Sun Yat-sen University, No.58 Zhongshan Road 2, Guangzhou, 510080, China

Equal Author Contribution:

Contributions:
Fubing Ouyang: Drafting/revision of the manuscript for content, including medical writing for content; Major role in the acquisition of data; Study concept or design; Analysis or interpretation of data
Jiaoxing Li: Drafting/revision of the manuscript for content, including medical writing for content; Major role in the acquisition of data; Analysis or interpretation of data
Huixing Zeng: Major role in the acquisition of data; Analysis or interpretation of data
Meng Wang: Major role in the acquisition of data; Analysis or interpretation of data
Yuhua Fan: Drafting/revision of the manuscript for content, including medical writing for content; Study concept or design; Analysis or interpretation of data

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A 41-year-old woman complained of sudden numbness of the left face and limbs without neck pain, paraparesis, urinary retention or constipation. Neurological examination revealed onion-skin pattern hemifacial dysesthesia and disturbance of touch and proprioception sensation of the left limbs. T2WI and DWI showed left posterior spinal cord infarction at C1 level (Figure, A-D). MRA demonstrated stenosis of bilateral vertebral arteries (Figure, E-F). High-resolution MRI revealed the high signals of intramural hematoma in bilateral vertebral arteries indicating the diagnosis of dissection (Figure, G-J). Isolated posterior spinal cord infarction is rare, and vertebral artery dissection should be considered as an etiological mechanism.
Reference


Figure legend

Figure. Angiographic and high-resolution MRI of bilateral vertebral artery dissection

T2WI (A) and DWI (B-D) showed the left posterior spinal cord infarction (arrow). MRA (E-F) showed stenosis of vertebral arteries in the right V3 segment (arrow) and the left V3-V4 segments (arrowhead). High-resolution MRI of vertebral arteries (G-J) revealed the intramural hematoma indicating arterial dissection (right, arrow; left, arrowhead).
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