Extending Carotid Artery Thrombus Associated with Thrombocytosis

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A 74-year-old woman developed aphasia and visited our institute. She had no malignancies nor disorders that might induce a prothrombotic state except for thrombocytosis (782,000/mm³). Diffusion-weighted magnetic resonance imaging showed a new area of high signal intensity in the left posterior temporal lobe (Picture 1). Examination of the carotid arteries revealed a thrombus extending from the bifurcation of the internal carotid artery (Picture 2). It is possible that the thrombus was caused by to-and-fro blood flow due to a carotid artery stenosis, which may explain the clinical symptoms.
(MR) imaging showed a fresh infarct at the left frontal lobe. MR angiography showed a signal reduction from the left internal carotid artery (ICA) (Picture 1). Ultrasonography revealed thrombus in the left ICA with surrounding to-and-fro flow (Picture 2A, asterisk). Although antiplatelet therapy was started, she developed right hemiparesis on day 8. MR imaging then revealed an enlarged infarction, and MR angiography showed left ICA occlusion (Picture 3). The thrombus had grown to the more proximal portion beyond the bifurcation (Picture 2C and D, asterisks). Examinations suggested not secondary but essential thrombocythemia, although bone marrow aspiration was not performed, and the JAK2 V617 mutation was negative. Although essential thrombocythemia is mainly regarded as a risk factor for small-vessel stroke, it can also cause large-vessel occlusion (I).

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Reference