

# Extracranial-intracranial bypass for ischemic stroke

One main indication today is [stroke](#) prevention by flow augmentation in the setting of [chronic cerebral hemodynamic ischemia](#).

---

[Human immunodeficiency virus](#) (HIV)-associated [vasculopathy](#) can cause [ischemic stroke](#); however, there is limited evidence on optimal [management](#).

Mizushima et al. reported a case of [acute ischemic stroke](#) due to progressive [internal carotid artery stenosis](#) in an [HIV](#)-positive patient. [Superficial temporal artery to middle cerebral artery bypass](#)), in addition to the best medical treatments, prevented [stroke progression](#).

A 39-year-old man with HIV infection presented with a sudden onset of [aphasia](#) and right [hemiparesis](#). Magnetic resonance imaging revealed an ischemic lesion in the [left basal ganglia](#) and concentric thickening of the vessel wall in the terminal portion of the bilateral ICAs. Despite maximal medical treatments for HIV-associated vasculopathy and possible opportunistic infections, bilateral ICA stenoses progressed, leading to a second hemodynamic stroke event. Because [tissue plasminogen activator](#) treatment failed, they performed STA-MCA bypass. A significant improvement in neurological symptoms and [cerebral blood flow](#) was observed after surgery. No further stroke events occurred during the continuation of medical treatments <sup>1)</sup>.

1)

Mizushima M, Sugiyama T, Eguchi K, Tarisawa M, Tokairin K, Ito M, Hashimoto D, Yabe I, Fujimura M. Rescue [extracranial-intracranial bypass for ischemic stroke](#) secondary to progressive [human immunodeficiency virus](#)-associated [vasculopathy](#). J Neurol Surg A Cent Eur Neurosurg. 2022 Feb 22. doi: 10.1055/a-1779-4142. Epub ahead of print. PMID: 35193153.

From:  
<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:  
[https://neurosurgerywiki.com/wiki/doku.php?id=extracranial-intracranial\\_bypass\\_for\\_ischemic\\_stroke](https://neurosurgerywiki.com/wiki/doku.php?id=extracranial-intracranial_bypass_for_ischemic_stroke)

Last update: **2024/06/07 03:00**

