Identifying collaterals from the external carotid artery (ECA) is necessary before the treatment of the ophthalmic artery aneurysm. Jin et al. presented a manual carotid compression test to verify collaterals in ophthalmic artery aneurysms, and evaluate its usefulness.

From March 2013 to December 2017, endovascular coiling was performed in 19 consecutive patients with 20 OphA aneurysms. Jin et al. performed manual carotid compression tests for patients who had aneurysms incorporating entry of OphA. Clinical and angiographic outcomes were investigated.

Of 13 cases underwent manual carotid compression test, 12 cases were confirmed collateral flow from ECA to OphA. During the coil embolization, we tried to maintain the original OphA flow even if it has a collateral anastomosis. Among them, OphA occlusion occurred in one patient during coiling. Recurrence of the aneurysm occurred in a ruptured case and additional embolization was required.

The manual carotid compression test is a useful method to identify the collaterals from ECA in patients with OphA aneurysm. This test can be used as a screening test for confirming collateral flow in OphA aneurysms or as an alternative for patients who are difficult to perform BTO [1].

1)
Jin BH, Kwak YS, Kim YD, Cho JH. Usefulness of External Carotid Artery Angiogram with Manual Carotid Compression in Ophthalmic Artery Aneurysm. J Cerebrovasc Endovasc Neurosurg. 2019 Jun;21(2):94-100. doi: 10.7461/jcen.2019.21.2.94. Epub 2019 Jun 30. PubMed PMID: 31886145; PubMed Central PMCID: PMC6911773.