

TITLE:

Conjunctival and Episcleral Blood Flow Restoration After Strabismus Surgery on Swept-Source Optical Coherence Tomography Angiography

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Ophthalmic Images

Conjunctival and Episcleral Blood Flow Restoration After Strabismus Surgery on Swept-Source Optical Coherence Tomography Angiography

Akinari Yamamoto, MD; Manabu Miyata, MD, PhD; Kenji Suda, MD

A 1 d After operation

B 2 wk After operation

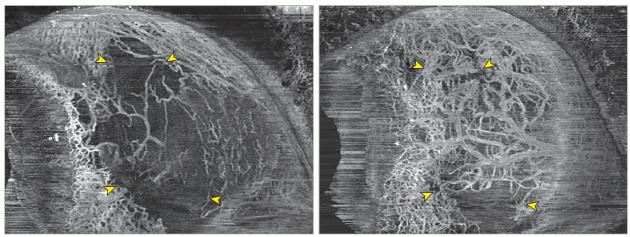


Figure. Postoperative change of conjunctival and episcleral blood flow. A, The absence of conjunctival and episcleral blood flow of the lateral rectus muscle in the left eye was noted 1 day postoperatively. B, Blood flow was increased 2 weeks postoperatively. Arrowheads indicate the boundaries of blood flow absence at 1 day postoperatively.

A woman in her 60s presented with hyperexotropia after a recession of bilateral medial rectus muscles for infantile esotropia was performed at age 11 years. She was also experiencing recession of a treatment-naive lateral rectus muscle and advancement of a recessed medial rectus muscle, with a 1 tendon-width downward transposition of the left eye. Swept-source optical coherence tomography angiography (OCTA; PLEX Elite 9000 [Carl Zeiss Meditec]) with a 10-diopter optical adaptor lens was performed on the recessed lateral rectus muscle. The OCTA images

suggested that conjunctival and episcleral blood flow decreased immediately after surgery (**Figure**, A) but was restored within 2 weeks (Figure, B).

Spectral-domain OCTA can facilitate the visualization of superficial blood flow, as in cases of conjunctival racemose hemangioma.¹ In this case, swept-source OCTA clearly depicted episcleral blood flow despite a chemotic conjunctiva. Blood interruption at the anterior segment from the anterior ciliary artery after strabismus surgery may be restored within 2 weeks.

ARTICLE INFORMATION

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Conflict of Interest Disclosures: None reported.

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REFERENCE

1. Chien JL, Sioufi K, Shields CL. Optical coherence tomography angiography of conjunctival racemose hemangioma. *Ophthalmology*. 2017;124(4):449. doi:10.1016/j.ophtha.2016.09.016