A 38-year-old woman with neurofibromatosis type 1 (NF1) presented for routine ophthalmic examination. The patient had long-standing peripheral retinal capillary nonperfusion in the left eye, which had been treated years ago with panretinal photocoagulation. Both eyes showed choroidal Yasunari nodules. The right eye showed no other pathologies. Visual acuity was 20/20 OU with correction. Recent magnetic resonance imaging of the neuraxis and orbits showed no gliomas. The patient was not known to have any systemic vasculopathy.

Compared with a visit 3 years earlier, the central retinal artery and branching arcades had thinned. A chorioretinal anastomosis had formed in the superotemporal macula at the site of a photocoagulation scar; a spiral-shaped choroidal vessel interconnected with both arterial and venous vessels from the superior arcades and a vein from the inferior arcade, which perfused the arterial supply of the central retina, including the fovea . Fluorescein angiography confirmed the new retrograde arterial supply through the anastomosis. The formation may have been associated with a combination of a hydrostatic pressure gradient over the retinal pigment epithelium in the direction of the retina and vascular endothelial growth factor production associated with retinal capillary nonperfusion.