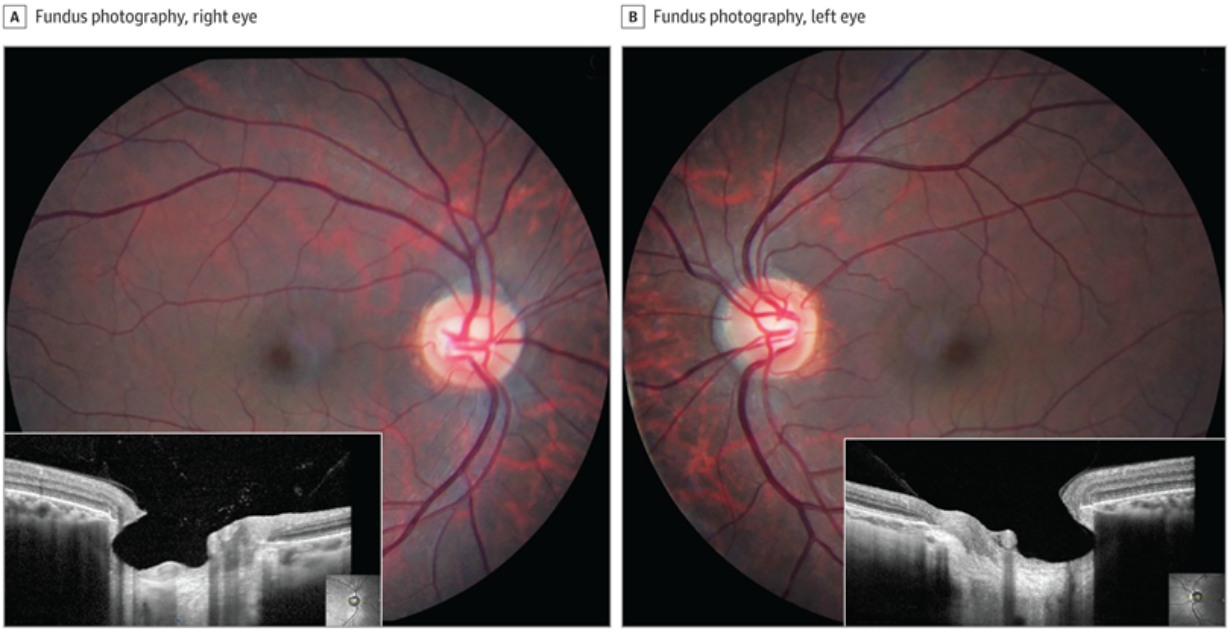
Optic Disc Dysplasia and Situs Inversus

A 33-year-old healthy man of normal height and weight presented for a routine eye examination. Visual acuity was 20/40 OU. Color vision was 1/8 OU. There was no relative afferent pupillary defect. Anterior-segment examination was normal with no iris coloboma. Intraocular pressures were 15 mm Hg in both eyes. Automated perimetry demonstrated paracentral scotomas. Ophthalmoscopic examination showed bilateral optic disc dysplasia and situs inversus (Figure). Cranial magnetic resonance imaging was normal.

Figure.



Fundus photography of the right (A) and left (B) eyes showing anomalous appearing optic discs with cupping and initial nasal trajectory of the blood vessels before curving temporally. Insets show the corresponding optical coherence tomography images

demonstrating the unusual shape and depth of the optic discs.

Optic disc dysplasia is a congenital anomaly that can be categorized under the broad term of an anomalous optic disc.[1,2] The appearance of the patient's optic discs was not compatible with optic nerve hypoplasia, which is associated with septo-optic dysplasia. Situs inversus of the optic disc refers to the initial nasal direction of the retinal vessels, thought to be caused by aberrant insertion of the optic stalk into the optic vesicle during gestation. Myopia, optic disc coloboma, tilted optic disc, optic disc pit, Ehlers-Danlos syndrome, and familial dextrocardia have all been associated with situs inversus of the optic disc.[3]

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Article Information

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