Foveal Granularity and Outer Retinal Abnormalities in a Young Patient With Idiopathic Intracranial Hypertension

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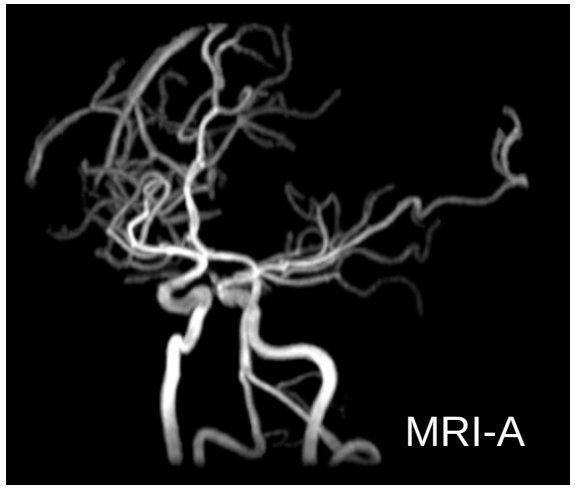
Introduction

Although not a rare condition in ophthalmic practice, it is generally perceived that ocular manifestations of idiopathic intracranial hypertensio (IIH) are restricted to papilledema and associated findings such as visual field defects or visual loss due to optic nerve damage. However, strict retinal findings have been described and are probably underreported. We report the case of a 17-year-old female patient with acute idiopathic intracranial hypertension who presented with foveal granularity and other macular abnormalities.



Case Report

A 17-year-old obese but otherwise healthy girl presented for consultation complaining of poor vision that she assumed was of refractive nature. Upon examination, her best corrected visual acuity was 20/25 OD and 20/20p OS. Dilated fundus exam revealed bilateral papilledema and subtle foveal granularity, in a pattern reminiscent of Jampol's dots as usually seen in multiple evanescent white dot syndrome (MEWDS). She was referred for urgent head CT scan and neurology consultation. Initial imaging and laboratory exams were normal, but lumbar puncture revealed elevated CSF pressure confirming the diagnosis of IIH. She was managed conservatively with acetazolamide and was advised about losing weight. MRI angiography (MRI-A) obtained after discharge revealed venous sinus stenosis.

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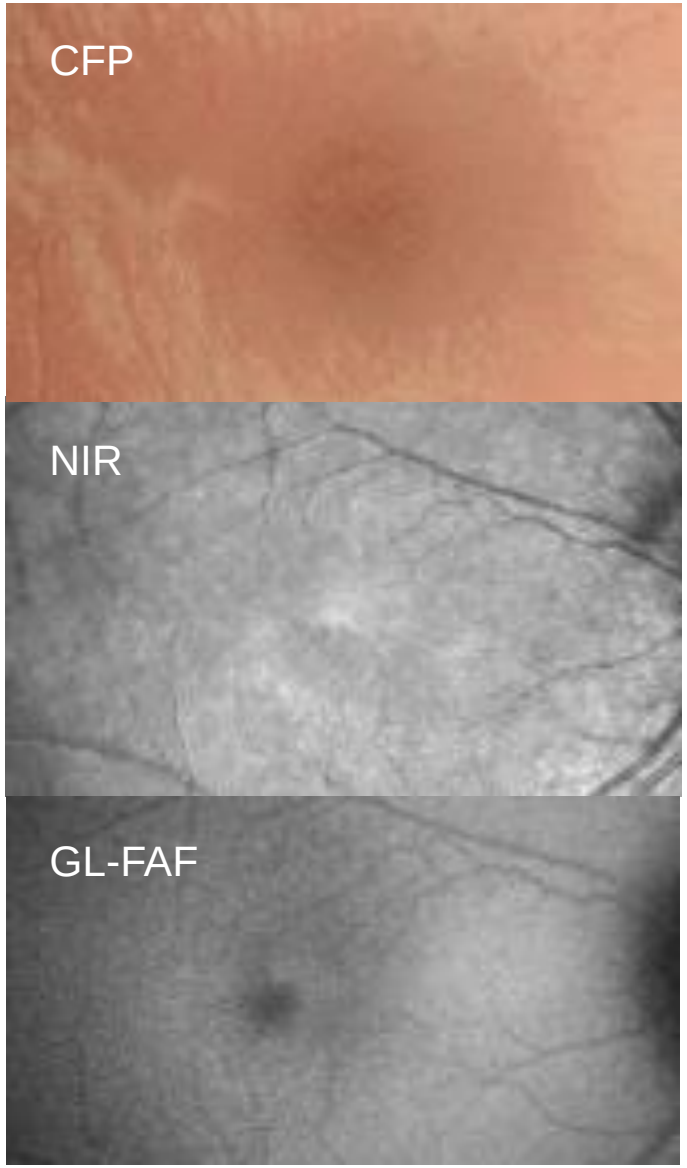
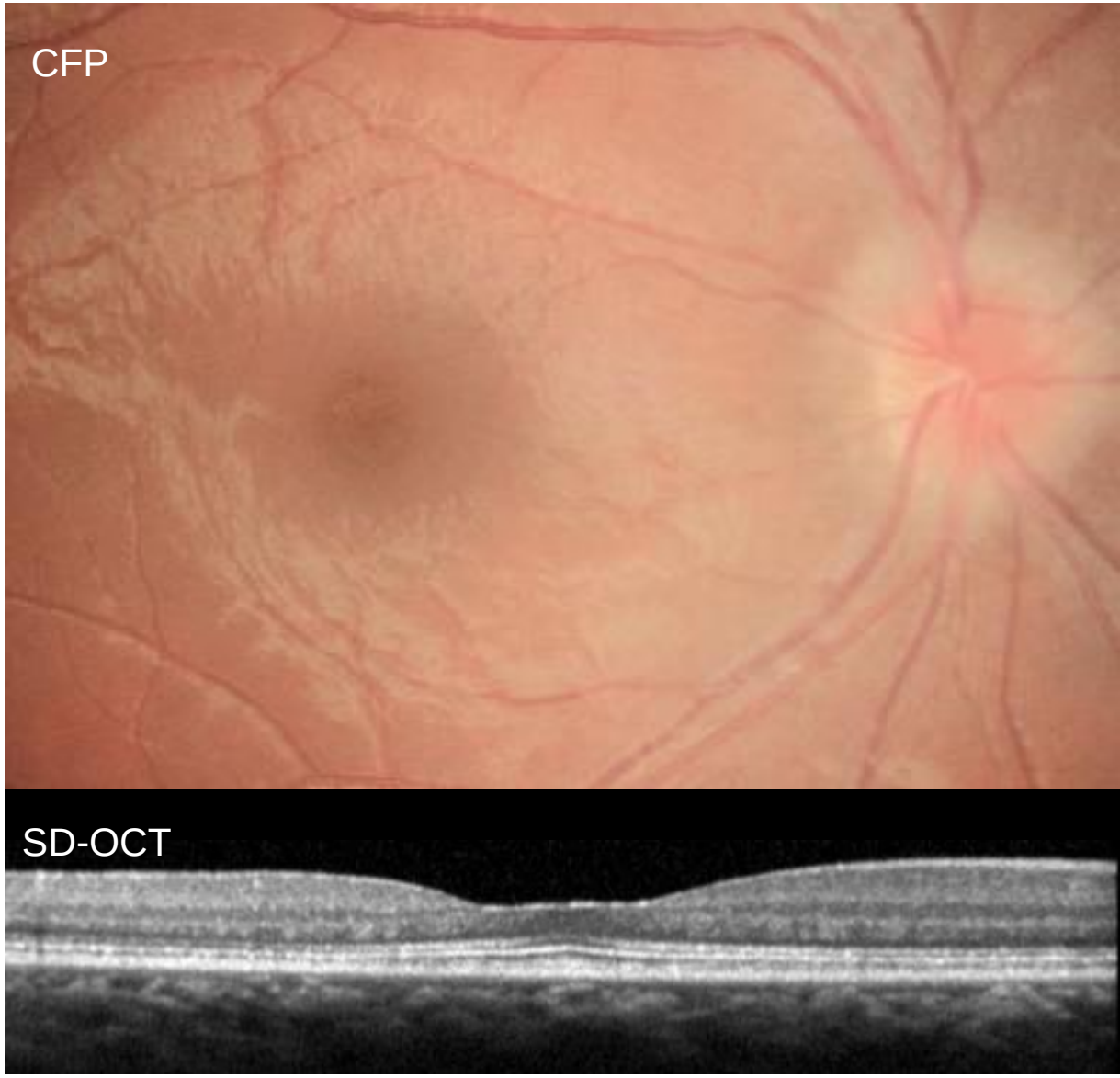
Retinal imaging was obtained in the 1st week after presentation. Color fundus photo revealed subtle, small, white-yellow foveolar dots that conferred a distinctive aspect of granularity, also highlighted in near-infrared reflectance imaging. SD-OCT revealed slight hyperreflectivity and roughness of the external limiting membrane, while the ellipsoid zone appeared continuous but coarse, with markedly irregular, uneven reflectivity. Attenuation of the interdigitation zone was also noticed in the temporal aspect of the fovea OU. All changes were bilateral and symmetric, and persisted through the months of follow up, although with decreasing intensity as our patient regained normal vision.





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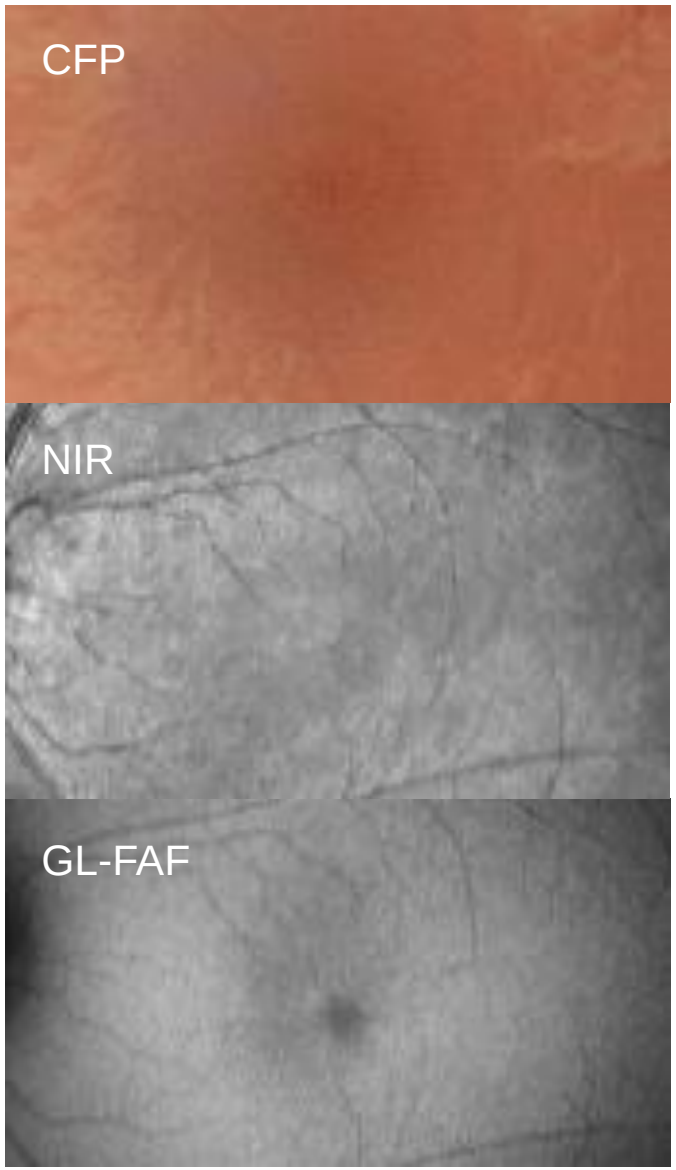
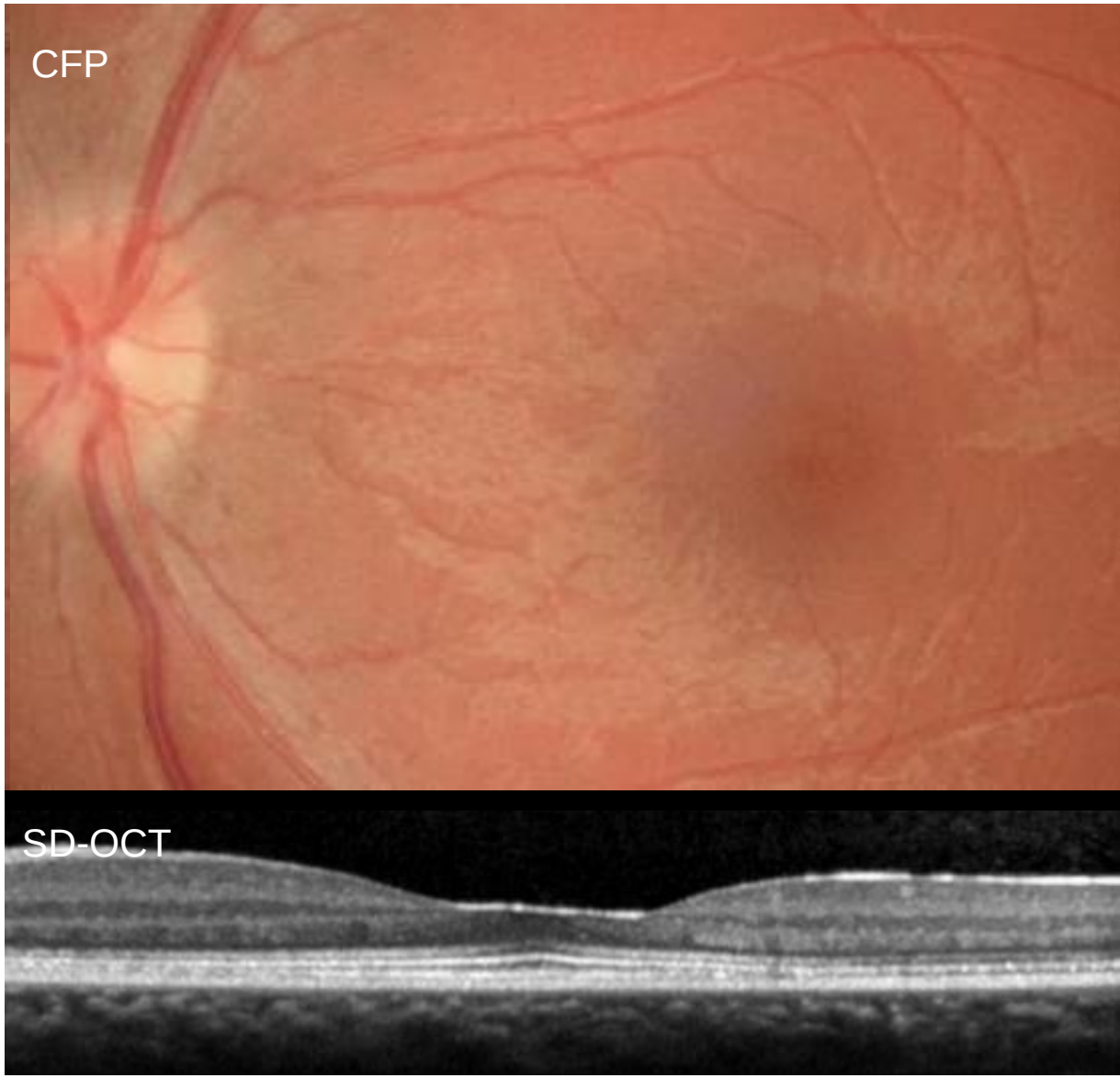
Green light fundus autofluorescence (GL-FAF) displayed a slight increase of central foveal hypoautofluorescence, which appeared slightly better demarcated than usual, and shifted temporally.





Discussion

As seen in our case, idiopathic intracranial hypertension may be accompanied by macular manifestations through mechanisms that are still poorly understood. Although these changes may often be of benign and reversible nature, it’s not warranted that they have no contribution in the visual loss that is sometimes observed in patients with this condition.

References

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