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Optic Disc Pit Maculopathy Leading to Vision Loss in a Pediatric Patient

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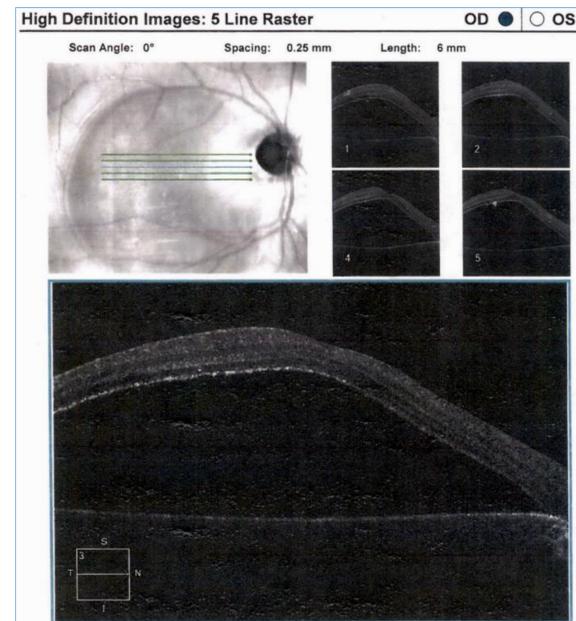
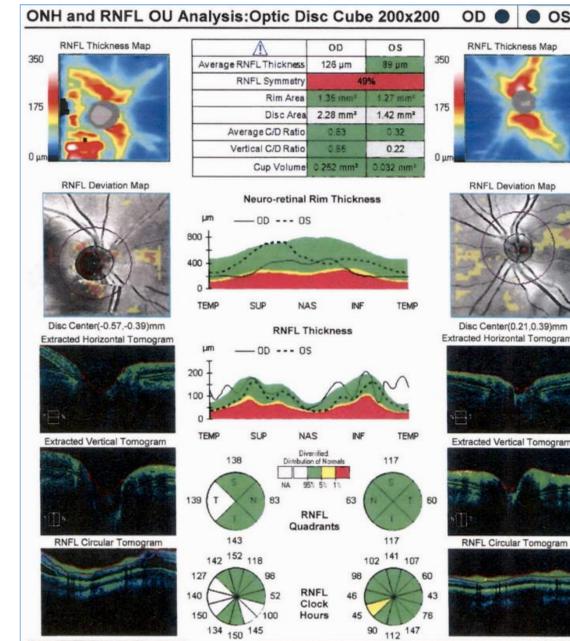
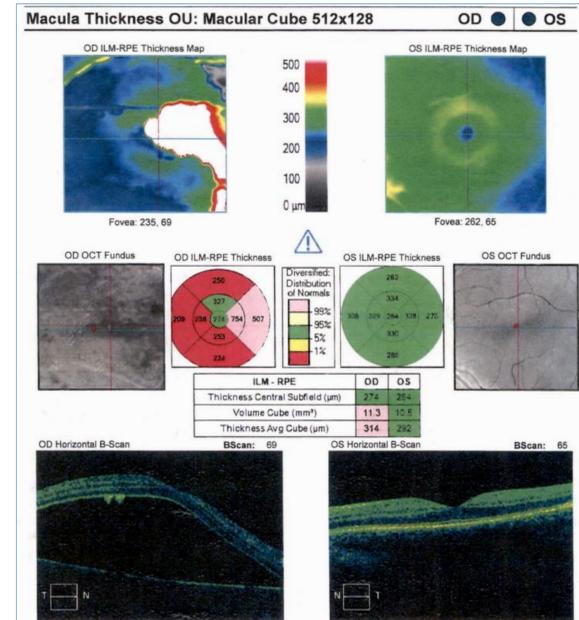
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Optic Disc Pit Maculopathy Leading to Significant Vision Loss in a Pediatric Patient

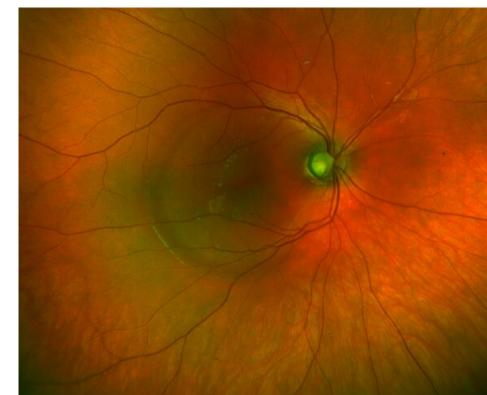
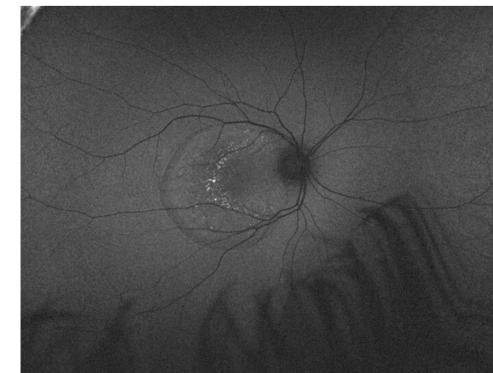
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Background:
 Optic disc pit (ODP) is a rare congenital anomaly of the optic disc, usually unilateral and can be shallow or very deep. An ODP typically appears in the inferotemporal quadrant or central portion of the disc and can lead to serous retinal detachments, normally found at the macula. Development of this maculopathy is sporadic, and the cause is currently unknown.

This case will review clinical characteristics of optic disc pit maculopathy in children and current treatments available. An emphasis in vision rehabilitation will be discussed as any visual insult during this development period can lead to long-term visual consequences.



Severe, well defined serous retinal detachment



Case History:
 A 6-year-old white male, KF, presented to clinic for a second opinion regarding his amblyopia diagnosis in the right eye. The amblyopia diagnosis was made prior to March 2020 by an outside OD, with the conclusion of the exam stating refractive amblyopia of the right eye. Occlusion treatment was initiated for 4 hours/day of the left eye. KF returned to clinic in July 2021 with parent reporting continued decrease in VA and a pediatrician referral for a second opinion.

Pertinent findings:
 Cycloplegic refraction found -1.00+5.00X115 OD and +1.00+0.50X090 OS with best corrected visual acuity of OD: 20/100 and OS: 20/20. Posterior segment examination revealed a temporally excavated area of the optic nerve OD with corresponding macular elevation. Upon further clinical evaluation and testing, optic nerve asymmetry was observed as well as a large area of macular fluid extending beyond the arcades. At this time KP was diagnosed with a serous retinal detachment secondary to ODP and referred to a retina specialist.

Treatment/Management:
 KF was sent to a retina specialist for further evaluation and treatment options. Although around 25% of optic disc pit maculopathy cases resolve spontaneously, observation will generally lead to significant vision loss which is especially important to consider in our pediatric patients who are in their visual development period. Due to the significant size of the detachment the retina specialists recommended PPV/MS/AFGx surgery, which was scheduled for 10/6/2021.

Discussion:
 KF was found to have an optic disc pit with corresponding serous retinal detachment in the right eye. Patients diagnosed with optic disc pits should be informed of the risk for development of optic disc pit maculopathy. Rates of maculopathy development vary from 25-75%, as a result patients should be encouraged to return for annual examinations or upon visual decline in an affected eye. After cycloplegic refraction, a fluctuating reflex could indicate a macular issue. Optic disc pit maculopathy recurrence is low but should be monitored closely. Whether the decreased vision is solely due to the serous detachment or refractive amblyopia remains to be seen. It is important for patients, and parents of those with optic disc pit maculopathy who undergo surgery to understand visual recovery can be a long and slow process. Amblyopia treatment will resume after treatment for the serous detachment.

Conclusion:
 It is important to always look for an underlying pathological cause for reduced vision in a short period of time. Once the underlying pathology has resolved or is treated, amblyopia treatment is always indicated for those children who are in their visual development period to ensure the best visual outcome.

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