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A Macular Detachment Hiding an Optic Disk Pit

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Abstract | **Case Report**

***Introduction*:** Optic disk pit is a rare congenital anomaly, susceptible to macular complications such as serous retinal detachment of the posterior pole. Its pathogenesis remains controversial, as does its treatment. ***Case Report*:** A 32-year-old patient presented with a progressive decline in visual acuity in her right eye over the past three years. Visual acuity was 3/10 in the right eye and counting fingers at 1 m in the left eye. Funduscopy revealed a temporal Optic disk pit on the right eye associated with a macular serous retinal detachment. On the left, a chorioretinal coloboma was found occupying the posterior pole. Macular optical coherence tomography (OCT) confirmed the subretinal elevation and its papillary origin. Our approach was to implement close surveillance. ***Conclusion*:** Optic disk pit is a rare congenital anomaly. The main complication is serous maculopathy, the pathophysiology of which remains incompletely understood and its treatment is not consensual. Optic disk pit should always be considered in cases of serous retinal detachment by fundus examination supplemented by OCT.

Keywords: Optic Disk Pit, Serous Macular Detachment, OCT.

INTRODUCTION

Optic disk pit is a rare congenital anomaly, susceptible to macular complications such as serous retinal detachment of the posterior pole. Its pathogenesis remains controversial, as does its treatment.

CASE REPORT

A 32-year-old patient presented with a progressive decline in visual acuity in her right eye over the past three years. Visual acuity was 3/10 in the right eye and counting fingers at 1 m in the left eye. Funduscopy revealed a temporal Optic disk pit on the right eye associated with a macular serous retinal detachment. On the left, a chorioretinal coloboma was found occupying the posterior pole. Macular optical coherence tomography (OCT) confirmed the subretinal elevation and its papillary origin (Figure1). Our approach was to implement close surveillance.

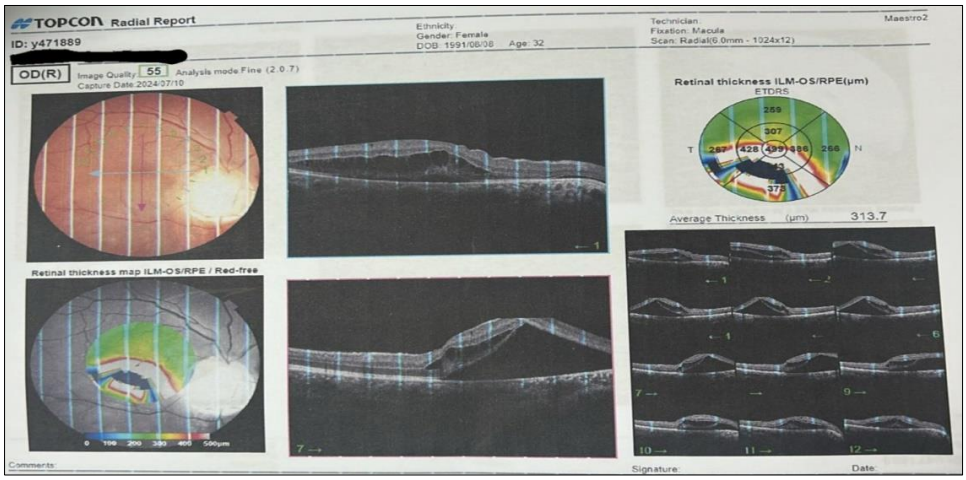

Figure 1: OCT confirms the subretinal elevation and its papillary origin in the right eye

DISCUSSION

Colobomatous optic disk pit are a congenital anomaly related to a dehiscence of the cribriform plate of the optic nerve, which causes a dysplastic retinal herniation, limited by a collagen wall [1]. This anomaly affects 1 in 11,000 eyes (according to the Blue Mountain Study) and is mostly unilateral (bilateral in 15% of cases). The dimples appear at the back of the eye as a grayish depression, most often temporal to the optic nerve [2]. Unlike a coloboma which generally affects the inferonasal part of the optic nerve.

Colobomatous optic disk pit is usually asymptomatic in the absence of complications and discovered during a systematic examination of the fundus. It can be complicated in 25 to 75% of cases by serous retinal detachment (SRD) and macular retinal schisis responsible for a decrease in visual acuity (VA). Then called maculopathy secondary to colobomatous dimple [3]. Papillary maculopathy is defined by the concentration of intraretinal and subretinal fluid at the level of the macula. Despite advances in fundus imaging, the origin of the fluid remains unknown (vascular, cerebrospinal fluid, dehiscence within the dimple) and the exact pathogenesis of maculopathy is not fully elucidated [4-6]. A recent study by the International Retina Group (IRG) shows that this maculopathy most often affects patients aged 30 to 40, although it is possible at any age [7], particularly in the elderly, and can be confused with other diagnoses such as exudative age-related macular degeneration (AMD) [3]. It is therefore particularly important to look for the presence of a colobomatous dimple in the assessment of RSD or intraretinal schisis [2]. The diagnosis is confirmed by optical coherence tomography (OCT) [8].

CONCLUSION

Optic disk pit is a rare congenital anomaly. The main complication is serous maculopathy, the pathophysiology of which remains incompletely understood and its treatment is not consensual. Optic disk pit should always be considered in cases of serous retinal detachment by fundus examination supplemented by OCT.

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