

A Case of Bilateral Chronic Serous Elevation at Posterior Pole

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Abstract: *Bilateral Chronic CSCR is a rare condition and leading to progressive decreased vision. The natural course of CSCR is found to be heterogeneous with inter individual variability thus creating a therapeutic dilemma.*

Keywords: CSCR, RPE Atrophy, Neurosensory retinal detachment, Eplerenone

1. Introduction

CSCR is one of the most frequent causes of diminution of vision among middle aged men. CSCR has a self-limiting course, but sometimes persists even more than 4-6 months with macular RPE degeneration (1). This disease affects unilateral eye but can be bilateral in patients aged more than fifty(2)

2. Case Report

A 42 year old male with type A Personality trait presented with gradual onset, painless, progressive diminution of vision

in both eyes over the past 15 years with increased blurriness and visual disturbances over past 2 years. Patient was evaluated systemically and found to be within normal limits including normal serum Cortisol level. No history of similar complaints among family members. On examination the best corrected Visual acuity in both eyes were 6/24. Slit lamp examination revealed normal anterior segment. IOP was 16 mmHg in both eyes. Dilated fundus examination revealed RPE atrophy in right eye with well demarcated serous retina elevation at posterior pole measuring upto 4 mm disc diameter with tract noted inferiorly. (Fig.1). Temporal neurosensory retinal detachment was noted in left eye(Fig.2).



Figure 1

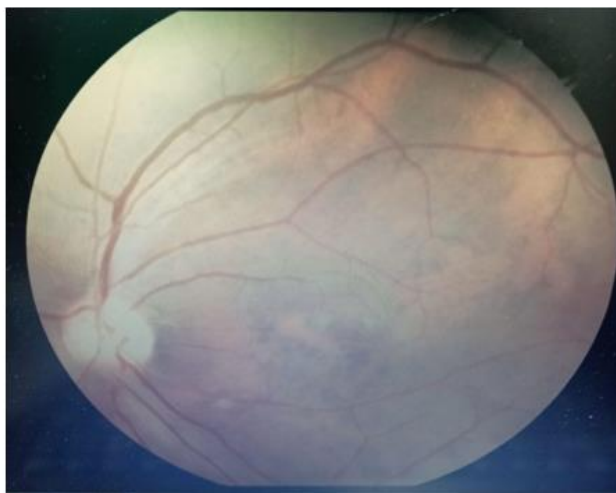


Figure 2

OCT was suggestive of Neurosensory retinal detachment with hyper-reflective spots in Right eye (Fig.3) and Foveal thinning was noted in left eye (Fig.4)

Fundus fluorescein angiography demonstrated a window defect in Right eye due to RPE atrophy with patchy

hyperfluorescent foci with increase in size and intensity with fuzzy borders in mid to late phase (Fig.5) whereas multiple diffuse leaks were noted in left eye (Fig.6). Patient was started on tablet Eplerenone 25 mg and tablet Alprazolam 0.5mg once a day. Improvement in visual acuity by 2 lines noted after 1 month. Patient is kept under regular follow up.

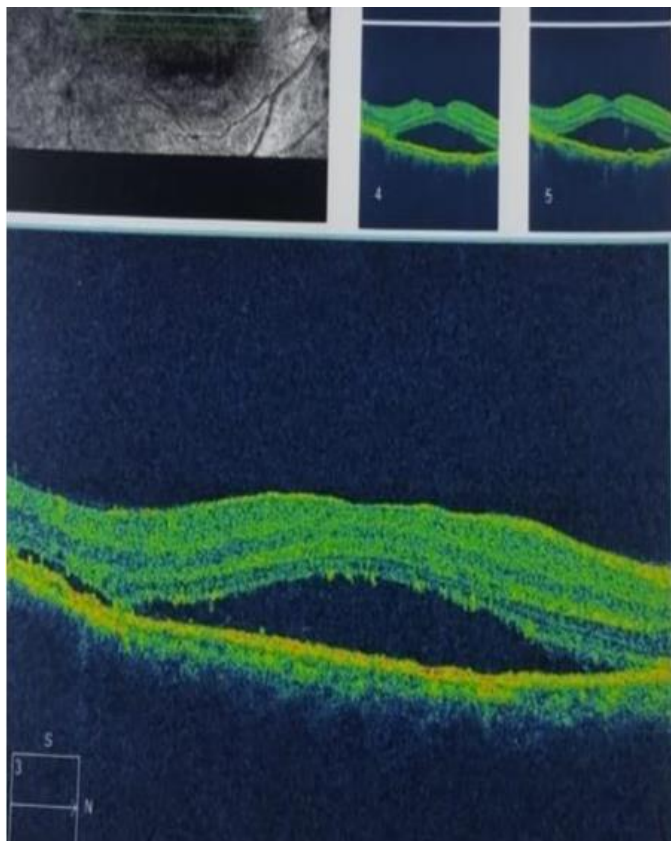


Figure 3

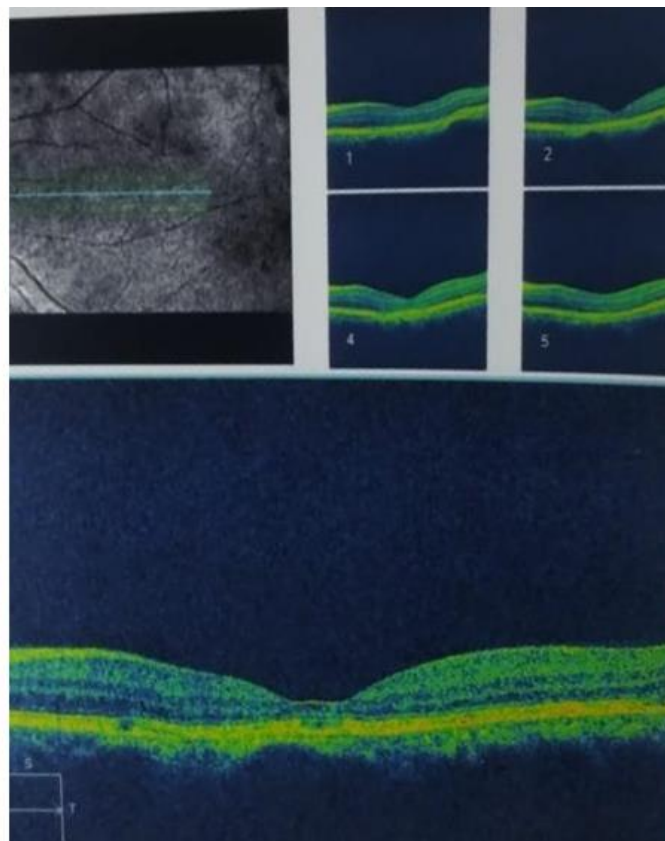


Figure 4



Figure 5

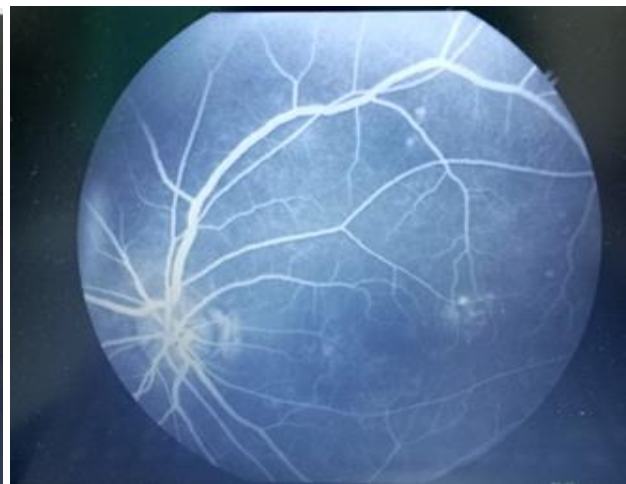


Figure 6

3. Discussion

Chronic CSCR with significant RPE Atrophy can lead to progressive visual dysfunction. In Chronic CSCR fluorescein angiography shows diffuse multiple leak in mid-late phase hence aids in diagnosis (3).

However, OCT imaging with pigment epithelial detachment and RPE atrophy increases the accuracy in diagnosing Chronic CSCR. OCT Angiography can detect choroidal neovascularization thus aiding early diagnosis (3).

Different treatment options are available with variable efficacy. Verteporfin PDT provoking a long-term vascular remodeling is the mainstream treatment available for CSCR. Pegylated

interferon alpha with its immunomodulatory action can be considered as a treatment option in chronic CSCR(4)

The binding of glucocorticoid and mineralocorticoid to the mineralocorticoid receptors expressed in choroidal endothelial cells induces upregulation and causing hyperpermeability. Eplerenone (25-50mg) is an Mineralocorticoid receptor antagonist which leads to rapid SRF resolution thereby improving visual acuity. Adverse effects are dose dependent however regular monitoring of serum potassium levels to be done.

Type A Personality with anxiety leads to elevated cortisol and can result in choroidal vasodilatation. Prompt treatment with anxiolytic like Alprazolam can reduce choroidal hyperpermeability. Medical management with methotrexate,

aspirin, ketoconazole can be attempted, however conclusive data is lacking regarding such interventions.(4)

4. Conclusion

Gradual progressive vision loss can be due to multiple etiologies. Various non-invasive and invasive modalities help to narrow it to few differential diagnosis. Use of fluorescein angiography and OCT can aid in diagnosis of Chronic CSCR. Since, Eplerenone targets several pathways it can lead to rapid symptomatic improvement particularly in Chronic CSCR

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