# Chronic Alcoholism & Central Serous Chorioretinopathy: A Case Report

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# **INTRODUCTION**

- Central Serous Chorioretinopathy (CSCR) is a retinal disorder characterized by the accumulation of subretinal fluid, leading to detachment of the neurosensory retina, predominantly affecting the macular region.
- Chronic Alcoholism is known to have profound systemic effects, including alterations in hypothalamic-pituitary-adrenal (HPA) axis, increased oxidative stress, changes in blood flow dynamics which may predispose individuals to vascular abnormalities, which potentially contribute to pathogenesis of CSCR.
- **Aim**: To present a case report highlighting the association between chronic alcoholism and central serous chorioretinopathy (CSCR), focusing on clinical presentation, management, and the importance of addressing alcohol use in patients with CSCR.
- **Method:** A case report

# **HISTORY**

- 33 years old male patient presented with complain of Acute diminution of vision of RE for past 3 days.
- He had history of **chronic alcohol abuse** and reported heavily drinking the week prior to noticing the sudden changes in his vision.

### **Personal & Systemic history-**

- Chronic Alcohol abuse/dependence with acute alcoholic intoxication
- Cocaine & Tobacco dependence, episodic
- No history of sleep disturbance, psychological stress, infection, any comorbidities or steroid ingestion.

### **EXAMINATION**

#### **Visual Acuity** ➤ Visual Acuity

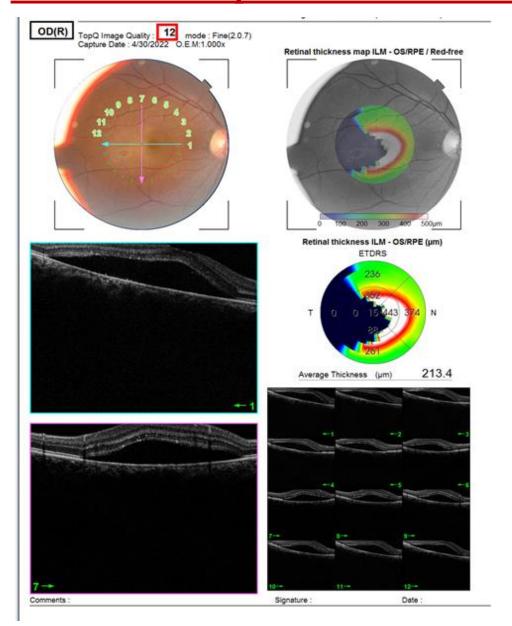
	OD	OS
UCVA	6/12	6/6
PIN HOLE	6/12	6/6

#### **▶** <u>Dilated Fundus Examination</u>

	OD	OS
DISC	0.3 CDR with HNRR with normal size, shape & well defined margins	0.3 CDR with HNRR with normal size, shape & well defined margins
MACULA	Foveal reflex absent & presence of fluid around macula	Normal
PERIPHERY	Intact 360	Intact 360
VESSELS	Normal in calibre with A:V=2:3	Normal in calibre with A:V=2:3

#### OCT MACULA - RE

#### **Subretinal fluid present around macula**







□ Above all clinical, fundus & OCT findings are suggestive of <u>Central</u> <u>Serous Chorioretinopathy (CSCR) in RE.</u>

### >MANAGEMENT

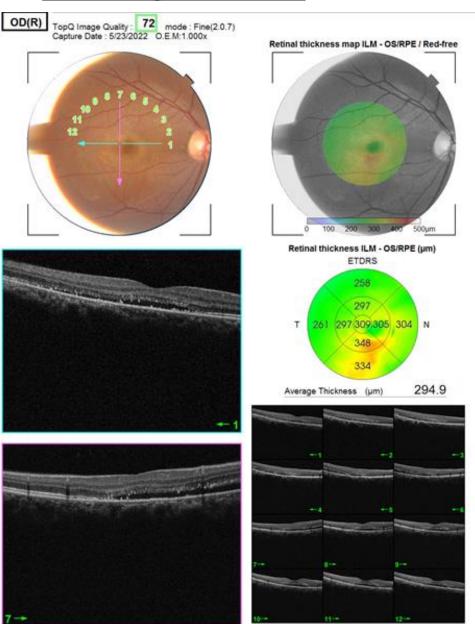
- Patient received **Deaddiction Counselling** to help develop habits to reduce alcohol dependence.
- Rx-Tab. MVBC OD for 1 month
  - Tab. Naltrexone 50 mg OD for 1 month
  - Tab. Thiamine 100 mg OD for 1 month
- CSCR resolved spontaneously within 3 month period.

### 3 months after treatment

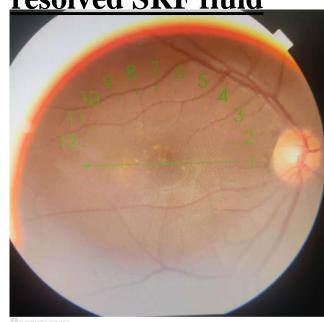
### **Visual Acuity** ➤ Visual Acuity

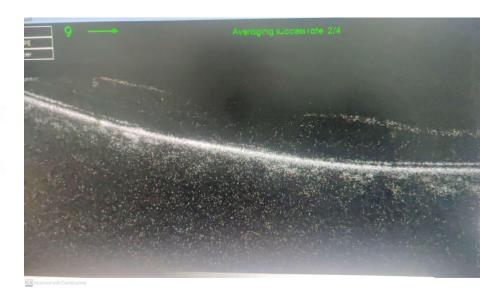
	OD	OS
UCVA	6/6	6/6
PINHOLE	6/6	6/6

#### 1 month after Treatmentresolving SRF fluid



3 month after Treatmentresolved SRF fluid





# **DISCUSSION**

- Central Serous Chorioretinopathy (CSCR) is characterized by serous detachment of the neurosensory retina from the retinal pigment epithelium leading to visual impairment.
- CSCR related to increased corticosteroids & alcohol intake causes hypercortisolism.
- Increased corticosteroids ⇒inhibition of collagen synthase ⇒ increase in the permeability of choroidal capillaries and the dysfunction of ionic pump in RPE.
- Alcohol intake also disturbs the hormone system by affecting the hypothalamic-pituitary-adrenal axis.
- Epinephrine → vasospasm of choroidal vessels → hyperpermeability of choroid

### **CONCLUSION**

• Heavy Alcohol consumption is one of the risk factor for CSCR. So it's necessary to screen & educate them to prevent this disease.

### **REFERENCES**

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- 3. Venkatesh R, et al. Alcoholism and its potential contribution to central serous chorioretinopathy. Indian J Ophthalmol. 2019;67(4):497-500.
- 4. Kawasaki R, et al. Alcohol consumption and the risk of central serous chorioretinopathy: A case-control study. Br J Ophthalmol. 2011;95(5):677-80.

### **Ethical Aspects and Conflict of Interest**

- Written, informed consent was taken by the patient before including his data as part of the poster.
- Total care was taken not to divulge name, OPD or IPD number of the patient, facts of ill-health and other information of the patient to anybody without patients or their guardian's permission. Strict confidentiality was maintained.
- Permission from the "Institutional Ethical Committee" was taken.
- It is a case report. Patient didnot bear any cost for this poster.

# THANK YOU