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## RESEARCH ARTICLE

### CENTRAL SEROUS CHORIORETINOPATHY-A SHORT STUDY

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#### ABSTRACT

**Introduction:** Central serous chorioretinopathy (CSCR) is a common maculopathy mainly affecting young and middle aged adults and occurring more frequently in men than in women. The acute manifestation is serous detachment of the microscropy retina at the posterior pole which is caused by active retinal pigment epithelial (RPE) leakage. Although exact pathophysiology of CSC has not been clearly understood the primary abnormality leading to RPE disruption and leakage is thought to be increased choroidal permeability. In addition too corticosteroid use, a number of risk factor for CSCR, such as hypertension, and antipsychotic medication use have been reported.

**Methods:** The data was collected from the medical records of the patients who were admitted with CSC to the ophthalmology department of SMHS Hospital Srinagar, India. The data was collected over a period of one year. The study method was designed in accordance with the tenets of the declaration of Helsinki.

**Results:** During this one year period a total of 45 patients were seen and diagnosed as central serous retinopathy. Most of the patients were males (30) and rest were females (15) with a male to female ratio of 2:1 higher than previous studies. In our patients we could see that there was a significant stress/anxiety in many of our patients. This was confirmed after neuropsychiatric evaluation of all patients who attended the department.

**Conclusion:** The present study found that mean annual incidence of CSR was higher among the males (2:1) than females. Stress was seen in significant number of our patients.

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## INTRODUCTION

Central serous chorioretinopathy (CSCR) is a common maculopathy mainly affecting young and middle aged adults and occurring more frequently in men than in women (Wang et al., 2008; Gemenetzi et al., 2010 and Ross, 2011). The acute manifestation is serous detachment of the microscropy retina at the posterior pole which is caused by active retinal pigment epithelial (RPE) leakage (Piccolino et al., 1994; Levine, 1989). The disease has a favourable natural course with the spontaneous resolution of the neuro febrial detachment in association with improvement of visual function. However in certain cases it is either no improvement may occur or progressive visual loss may occur (Loo, 2002). Although exact pathophysiology of CSC has not been clearly understood the primary abnormality leading to RPE disruption and leakage is thought to be increased choroidal permeability (Guyer, 1994). In most cases corticosteroid treatment is considered "idiopathic" (Tihl et al., 1999; Gamache, 2000 and Wakakura et al., 1997).

In addition to corticosteroid use, a number of risk factor for CSCR, such as hypertension, and antipsychotic medication use have been reported. We have tried to do this observational study to go more into the profile of CSR patients.

## MATERIALS AND METHODS

The data was collected from the medical records of the patients who were admitted with CSCR to the ophthalmology department of SMHS Hospital Srinagar, India. The data was collected over a period of one year. The study method was designed in accordance with the tenets of the declaration of Helsinki. All the basic investigations like visual acuity, dilated fundus examination (direct as well as indirect ophthalmoscopy examination), fluorescein angiography to work for areas of leakage and OCT was done to look for myorb fibrillar detached patients were followed.

## RESULTS

During this one year period a total of 45 patients were seen and diagnosed as central serous retinopathy.

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Most of the patients were males (30) and rest were females (15) with a male to female ratio of 2:1 higher than previous studies. Most of patients in our set up were in the age group of 30-50 years more on a lower side. Two of our female patients were pregnant.

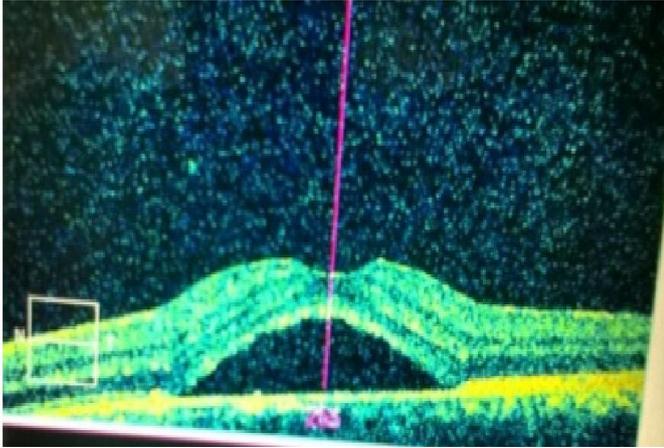


Fig. 1.

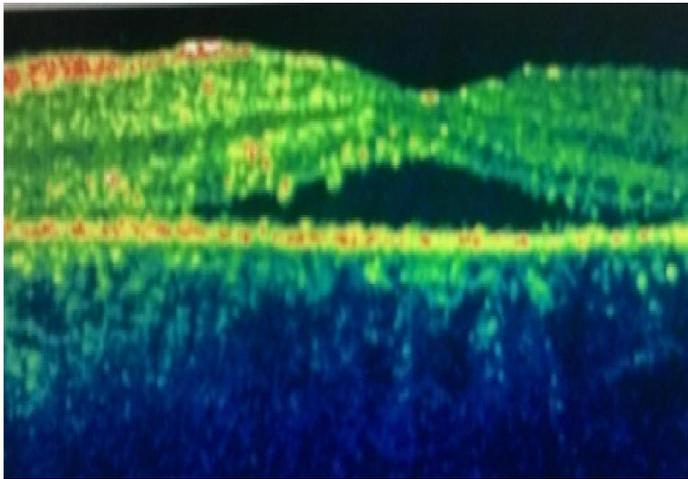


Fig. 2.

One of our male patient was a doctor who used to work in emergency department. One of our patient had a traumatic orbital injury. After adjusting for monthly income, place of residence, medical history including hypertension, diabetes mellitus, hyperlipidemia, chronic renal disease, sleep apnea, gout, malignancy, autoimmune disorders, febrile respiratory disorders and exposure to anti anxiety drugs, only exposure to anti anxiety drug was seen in significant number of patients. In our patients we could see that there was a significant stress/anxiety in many of our patients. This was confirmed after neuropsychiatric evaluation of all patients who attended the department.

## DISCUSSION

In present study result demonstrate that disease generally affect young people who are of young age, and visual symptoms such as blurred vision, metamorphosia and scotoma might interfere with their daily activity considerably. Most of our patients (66%) were males aged between (30-50 years) pregnancy as a

risk factor was noted in one female patient (Carvalho-Rechia, 2002 and Karadimas, 2004). The number of male patients with history of anxiety on anti anxiety drug was significant. Except for exposure to anti anxiety drug and pregnancy in one female patient, no other significant association between the reported risk factor such as hypertension and idiopathic CSR development was found in our study as has been previously reported. The one third of patients in our study had an elevated psychological stress. Some Oct pictures of patients who presented to us have been given below (Fig 1, Fig2). Emotional instability, insecurity and nervousness have been described as personality traits with CS (Con Rad, 2000 and Benneti, 1955). Our study similarly shows that persons with increased level of stress are more prone to development of this ocular disease. However such an interpretation can of course only be considered as a hypothesis which must be tested with a large sample of patients.

## Conclusion

The present study found that mean annual incidence of CSR was higher among the males (2:1) than females. Stress was seen in significant number of our patients. We presume that the males because of their aggressive behavior may be more prone to develop CSR, however further studies are warranted.

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