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RESEARCH ARTICLE

# CLINICAL PROFILE OF PATIENTS OF CENTRAL SEROUS CHORIORETINOPATHY PRESENTED TO THE TERTIARY HEALTH CARE CENTRE 

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V.A.Visual Acuity, BCVA-Best Corrected Visual Acuity, VEGF
Vascular Endothelial Growth Factor


#### Abstract

Purpose:To study the clinical profile and relationship between time of presentation and visual outcome in patients with central serous chorioretinopathy . Material and Method: Total 100 eyes of 50 patients were selected for the study who presented with complaints of blurring and or sudden painless loss of vision ,out of which 10 eyes of 5 patients were excluded due to corneal opacity, diabetic retinopathy, hypertensive retinopathy ,cataract and retinal detachment, retinitis pigmentosa. Total 90 eyes of 45 patients were included in the study and divided into two groups according to the time of presentation :1) Group 1-Within 15 days of onset of symptoms.2) Group 2 -After 2 months of onset of symptoms. Result:Group 1 patients showed the better visual outcome(BCVA 6/36-6/9) than the group 2 patients(BCVA 6/36-6/24). Conclusion: The time of presentation to the tertiary care centre was the major factors influence the visual outcome in patients with CSR.


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## Introduction:-

Central serous chorioretinopathy (CSR) is well known idiopathic acquired macular disorder with prevalence $1.7 \%{ }^{1}$. It is characterised by localized serous detachment of neurosensory retina from retinal pigment epithelium(RPE) due to formation of serous cystic space in between. It usually affect the age group between 20-40- years with male preponderance i.e. male to female ratio 3:1.

Etiological factors are psychological stress, steroids intake for several autoimmune disorders , hypertension, dialysis for chronic kidney disease, gastrointestinal infection with Helicobacter Pylori, sleep apnoea syndrome. Mainly two forms of CSR are known:(1)Acute form which is self limiting in nature and (2) Chronic form. Niroj Kumar Sahoo et al (2019) studied the prevalence, risk factor and treatment modalities in case of CSR but there was no information about the duration and time of presentation and visual outcome in patients of CSR. ${ }^{1}$ SumitRandhir Singh et al (2019) studied the association of CSR with patchydrusens with low prevalence rate but nit discuss about the relationship between duration of symptoms and visual outcome in case of CSR. ${ }^{2}$

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## Material And Method:-

This study is a prospective study done at the Maharani Laxmi Bai Medical College, department of Ophthalmology between February 2021 to august 2022.Total 100 eyes of 50 patients were selected for the study who was presented with complaints of blurring and or sudden painless loss of vision ,out of which 10 eyes of 5 patients were excluded due to corneal opacity, diabetic retinopathy, hypertensive retinopathy , cataract and retinal detachment, retinitis pigmentosa. Total 90 eyes of 45 patients were included in the study and divided into two groups according to the time of presentation :-

1) Group 1-Within 15 days of onset of symptoms
2) Group 2 -After 2 months of onset of symptoms

Selected patients of both the group were examined for V.A., V.A. with pinhole, BCVA, amsler grid testing, ophthalmoscopic fundus examination,Optical Coherence Tomography, t-test and chi square test were applied as test of significance

## Result:-

In this study the mean age of patients was 38 years with 30 males.In this study we found that all the patients of group 1 (who presented within 15 days of onset of symptoms of blurring of vision ,V.A. 6/60-6/36) are treated primarly by reassurance at their first visit and $40 \%$ of patients at their first follow up visit at 1 month and $40 \%$ of patients at their second follow up visit showed spontaneous resolution with V.A. 6/36-6/9. $20 \%$ of patients who not showed spontaneous resolution after 4 months at their subsequent follow up visit they treated with oral spironolactone ( 40 mg two times a day), out of which $60 \%$ show resolution within a month of medication, $30 \%$ treated with laser photocoagulation who developed recurrence and $10 \%$ treated with intravitreal anti-VEGF who developed choroidal neovascularization(CNV) \& showed favourable visual outcome with BCVA 6/36-6/18.

Patients of group 2 (who reported after 2 months of onset of symptoms of blurring of vision , sudden loss of vision, V.A. finger count at 2 meter to $6 / 60$ ) at their first visit were treated primarly with reassurance. Out of which only $30 \%$ showed spontaneous resolution .Remaining $70 \%$ treated with oral spironolactone ( 40 mg two times a day) , out of which $30 \%$ of patients showed resolution with BCVA 6/60-6/24, remaining $40 \%$ treated with laser photocoagulation who developed recurrence with progressive loss of vision and showed favourable visual outcome with BCVA 6/60-6/24 and $30 \%$ who developed CNV were treated with intravitreal anti- VEGF and showed BCVA $6 / 60-6 / 24$,which was statistically significant. In our study there were no associated risk factors presented.

## Discussion:-

In our study mean age of patients in between 30-40 years of age group and male to female ratio was $3: 1$ which was similar to the Upasana Ajmani et al who were studied that the mean age 35 years and $79.24 \%$ male gender. ${ }^{3}$

In our study the duration of symptoms and time of presentation of patients to the tertiary care centre was the major influencing factor for better visual outcome in case of CSR. The group 1 patients showed better visual outcome than group 2 patients which was similar to the Maalej et al and Aggio et al who studied that visual acuity at presentation and duration of symptoms defined the visual prognosis in patients of CSR. ${ }^{4}$

## Conclusion:-

The time of presentation to the tertiary care centre was the major factors influence the visual outcome in patients with CSR.

## Acknowledgement:-

None.
Table 1:- showing clinical presentation of patients with CSR.

| Time <br> Of <br> presentation | V.A. | V.A. <br> With <br> pinhole | Amsler <br> grid | Ophthalmoscopic examination | OCT |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Group 1 | $6 / 60-$ <br> $6 / 36$ | $6 / 60-6 / 24$ | Metamorphopsia, <br> micropsia | slight elevation of macular region, <br> demarketing circular ring reflex, <br> foveolar reflex absent | Neurosensory <br> Retinal <br> detachment |


| Group 2 | Finger <br> count <br> 2 meter to <br> $6 / 60$ | $6 / 60-6 / 36$ | Metamorphopsia, <br> Micropsia, <br> dyschromatopsia | Slight elevation of macular <br> region, <br> Demarketing circular ring reflex <br> ,foveolar reflex absent, <br> multifocal pigmentary deposits <br> are seen,small area of RPE <br> detachment | Neurosensory <br> retinal <br> detachment |
| :--- | :--- | :--- | :--- | :--- | :--- |

Figure 1:-The OCT image of left eye of 38 years old male of case of CSR showing the central large serous detachment of neurosensory retina from RPE .


Figure2:- Showing the left eye OCT image of same patient after spontaneous resolution.


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