

**EFFECTIVE MANAGEMENT OF CENTRAL SEROUS RETINOPATHY IN AYURVEDA-
A SINGLE CASE STUDY***¹Dr. Mamatha K. V., ²Dr. Sandhya Rani D. and ³Dr. Rashma S.¹Professor & HOD, Department of Shalaky Tantra, SDMIAH, Bengaluru.²Associate Professor, Department of Shalaky Tantra, JSSAMCH, Mysuru.³Assistant Professor, Department of Swasthavritta, SDMIAH, Bengaluru.***Corresponding Author: Dr. Mamatha K. V.**

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ABSTRACT

Central serous retinopathy (CSR) is also known as Central Serous Chorio Retinopathy (CSCR), typically affects middle-aged men and is characterized by serous neurosensory detachment (NSD) of retina at the posterior pole. The underlying pathogenesis revolves around functional or structural defect in the fluid-pumping capabilities of the retinal pigment epithelium (RPE) and choroidal vascular stasis or hyperpermeability. Most cases are idiopathic and regress spontaneously within 4 months with good visual recovery. However, a few suffer from persistent or recurrent serous macular detachment leading to progressive visual loss. In contemporary medicine observation, Anti VEGF injections, Mineralocorticoid receptor antagonists, Intravitreal Triamcinolone and Photocoagulation are advised in this case. The pathogenesis, sign and symptoms of CSR has similarities with Tritiyapatalagata timira explained in Ayurveda. A diagnosed case of huge CSR was treated with Panchakarma, Kriyakalpa and internal medications based on Tritiyapatalagata timira chikitsa described in Sushruta Samhita.

KEYWORDS: Central serous retinopathy (CSR), Central Serous Chorio Retinopathy (CSCR), Tritiyapatalagata timira, Panchakarma, Kriyakalpa.

INTRODUCTION

CSCR is a disease characterized by localized NSD with or without focal pigment epithelial detachments (PEDs) and altered retinal pigment epithelium (RPE).^[1] There are two forms, i.e., acute and chronic. The acute form usually resolves within 4 months, leaving mostly colour discrimination defects in few patients. The chronic form is characterized by widespread tracks of RPE atrophy, showing reduced fundus autofluorescence (FAF). Chronic form of the disease can also have irregular RPE detachments and long-standing intraretinal cystoid cavities. CSR typically affects one eye of a young or middle (20- 50 years) aged, males more than females.^[2] The Incidence of CSR is said to be 10 in 1,00,000. The condition does not appear to be with any clear predisposing factors,^[3] but defined risk factors include Steroid administration, Helicobacter pylori infection, Pregnancy, Psychological stress and Sleep apnoea syndrome. Spontaneous resolution occurs within 3-6 months with return to near normal or normal vision occurs in this case. Recurrence is seen in up to 50% and prolong detachment is associated with gradual photoreceptor and RPE degeneration and permanently reduced vision.^[4] Multiple recurrent attacks may give similar effect.

It can be correlated with *Tritiyapatalagata timira* explained in *Drishtigata rogas* explained in *Sushruta Samhita* which has characteristic features like patient not able to perceive the image at the centre part for example, people appearing without ears, nose, eyes.^[5]

CASE REPORT

- A 32-year-old male patient came to OPD of *Shalakyatantra* with complaints of painless progressive loss of vision in left eye for 1 month. Past history revealed that patient was not a known case of Hypertension, Diabetes Mellitus, Bronchial Asthma, Hypothyroidism. While the patient was riding the bike at night, suddenly an insect hit his left eye, patient experienced pain and there was redness for 1 week, after which there was blurring of vision in left eye especially in the central part of the objects and within 3 days there was complete loss of vision for which patient consulted SDM hospital and diagnosed as CSR. He was referred to a higher center for secondary opinion and further investigation and was diagnosed with huge central serous retinal detachment in left eye. Patient was referred back to SDMIAH for further treatment and was prescribed with oral and further admission and treatment.

- **Setting:** OPD and IPD, Department Of *Shalakyatantra*, SDMIAH, Bengaluru.
- **Plan of Treatment:** *Shodhana Chikitsa*, *Kriyakalpa chikitsa*, *shamanaushadhis* were adopted and assessment was done before and after treatment.

Table 1: General Physical Examination.

Appearance	Bulky
Built	Endomorphic
Nourishment	Well nourished
Gait	Normal
Pallor	Absent
Icterus	Absent
Cyanosis	Absent
Clubbing	Absent
Edema	Absent
Lymphadenopathy	Absent

Systemic Examination, No Evident Changes Were Noted.

Table 2: Dashavidha Rogi Pareeksha.

Prakriti	Dwandwaja, Kapha-Pitta	
Vikrita Dosha	Kapha	
Dushya	Rasa, Mamsa and Meda.	
Sara	Madhyama	
Samhanana	Madhyama	
Satva	Madhyama	
Aahara Sakthi	Abhyavarana shakti	Pravara
	Jarana shakti	Pravara
Vyayama Sakthi	Avara	
Satmya	Madyama	
Vaya	Madhyama	
Pramana	Pravara	

Table 3: Astasthan Pareeksha.

Nadi	Prakrita
Mala	Niraama Mala, Prakrita.
Mootra	Prakrita
Jihva	Aliptata
Sabda	Prakrita
Sparsha	Anushna Sheetha
Drik	Prakrita
Aakruti	Sthoola

Table 4: Slit Lamp Examination.

STRUCTURE	EXAMINATION	RIGHT EYE	LEFT EYE
EYE LIDS	Position	Normal	Normal
	Movements	Normal	Normal
LACRYMAL APPARATUS	Lachrymal sac & puncta	Patent	Patent
	Regurgitation test	Negative	Negative
EYE BALL	Position & movement	Normal	Normal
	Visual axis	Normal	Normal
CONJUNCTIVA	Bulbar conjunctiva	No abnormalities	No abnormalities
	Palpebral conjunctiva	No pallor	No pallor
SCLERA	Discoloration	Absent	Absent
	Inflammation	Absent	Absent
CORNEA	Transparency	Normal	Normal
	Reflex	Normal	Normal
PUPIL	Colour	Black	Black
	Consensual light reflex	Normal	Normal
	Swinging light reflex	Normal	Normal
LENS	Transparency	Normal	Normal

Table 5: Visual Acuity.

	DISTANT VISION	NEAR VISION	PINHOLE VISION
RIGHT	6/6	N6	6/6
LEFT	FC	N6	FC
BOTH	6/6	N6	-

Table 6: Ophthalmoscopic Examination.

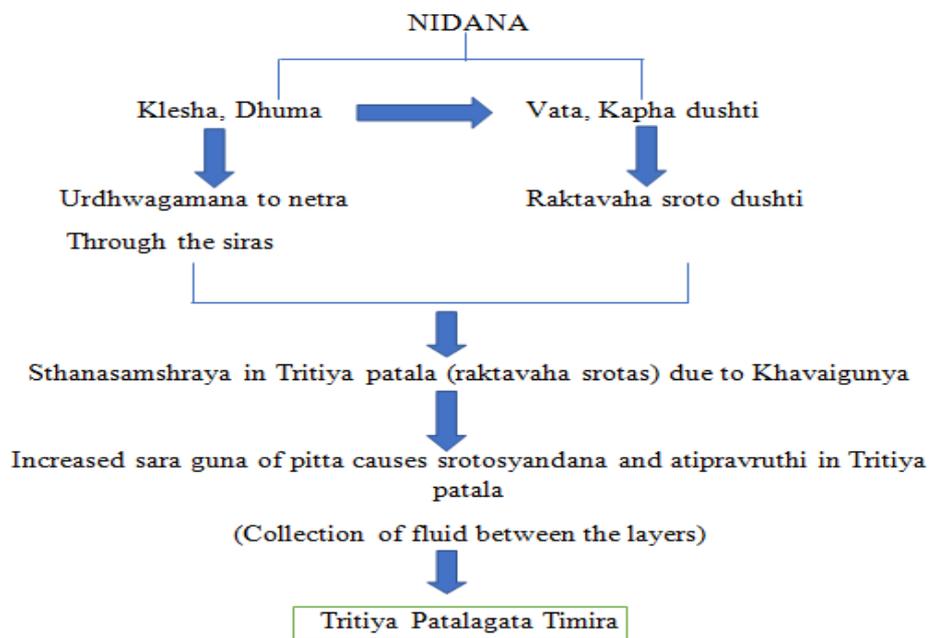
	RIGHT EYE	LEFT EYE
MEDIA	Clear	Clear
OPTIC DISC	Well defined margins	Well defined margins
VESSELS	Normal, no tortuosity, aneurism	Normal, no tortuosity, aneurism
MACULA	Reflex present	Dull reflex
BACKGROUND	A small circular dark spot in the central retina towards the temporal side of the macula (extra foveal) suggesting pigment epithelial detachment	Sharp Demarcated border covering the nasal part and the temporal part of the optic disc including optic disc suggesting CSR

Roga Pariksha

NIDANA:- Abhighata, klesha, dhuma, bhoutika abhigata, yantrika abhigata (as told in sanghata bala pravruttha vyadhi).

Poorvarupa:- Shuka poornabha, Avila darshana.

Rupa:- Mahantyaapi cha rupani chadithaniva vasasa, Karna nasa akshi yukthani viprithani vikshyate

Samprapthi**Samprapthi Ghataka**

DOSHA	Kapha Vata pradhana tridosha
DUSHYA	Rasa, Rakta, Mamsa, Meda
AGNI	Dhatwagni mandya
AAMA	Dhatwagni mandya janya aama
SROTAS	Rasavaha, Raktavaha, Mamsavaha, Medovaha
SROTO DUSHTI PRAKARA	Ati pravrutthi, Vimarga gamana
UDHBHAVA STHANA	Netra
SANCHARA STHANA	Raktavaha srotas of netra
ADHISTHANA	Drishti patala
ROGA MARGA	Madhyama
SADHYASADHYATA	Yapya

Vyadhi Vinischaya/ Diagnosis

→Tritiya Patalagata timira

→CSCR (central serous chorioretinopathy) or CSC (central serous choroidopathy).

Chikitsa Administered

DATE	TREATMENT
Day 1 and Day 2	Sarvanga abhyanga with Triphala taila
Day 2	Sadhyo virechana with Trivruth lehya (70gms) and 200 ml ksheera No of Vegas-12
Day 3 to Day9	TAKRADHARA: Musta, Amalaki, Asanadi sadhita Takra BIDALAKA: Musta, Haritaki, Kachora SEKA: Eranda, Triphala and Yashtimadhu NASYA: Guda Nagara 8 ⁰ /8 ⁰ (Mukha Abhyanga with Asanabilwadi taila) NASYA: On 7 th 8 th 9 th Anu taila THALAM: Rasnadi churna, Amalaki churna

Internal Medication: (Advised for 15 days)

- Vasaguduchyadi Kashaya 3teaspoon two times a day with 6teaspoon water (Before food).
- Tab. Saphthamrutha loha 2 tablets twice a day (Before food).
- Tab. Samshamani vati 2 tablets twice a day (Before food).
- Tab. Chandraprabha vati 2 tablets twice a day (After food).
- Elaneer Kuzhambu 1⁰ twice a day.

Table 7: Changes In Visual Acuity During Treatment in Left Eye.

Left eye	Distant vision	Near vision	Pinhole vision
Before Treatment	FC	N6	FC
During Treatment	6/24	N6	6/24
After Treatment	6/9	N6	6/12

Table 8: Confrontation Test.

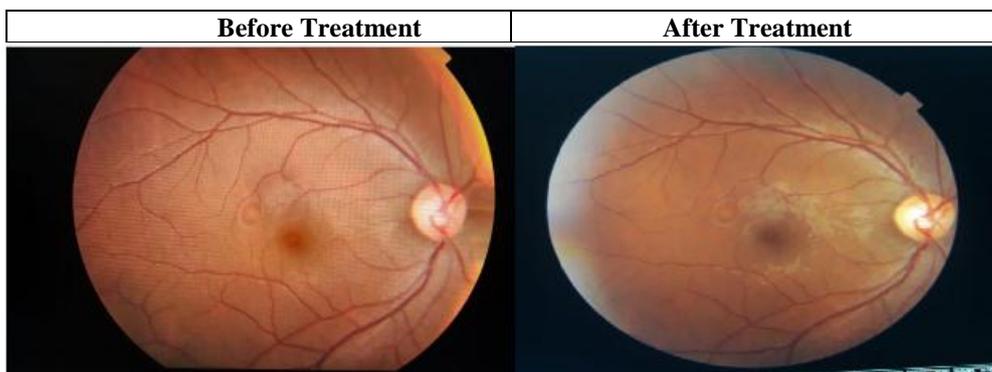
	Superior		Nasal		Inferior		Temporal	
Normal	50°		60°		70°		90°	
	BT	AT	BT	AT	BT	AT	BT	AT
RIGHT	50°	50°	60°	60°	70°	70°	90°	90°
LEFT	0°	40°	0°	50°	0°	60°	0°	80°

Table 9: Effect on Scotoma.

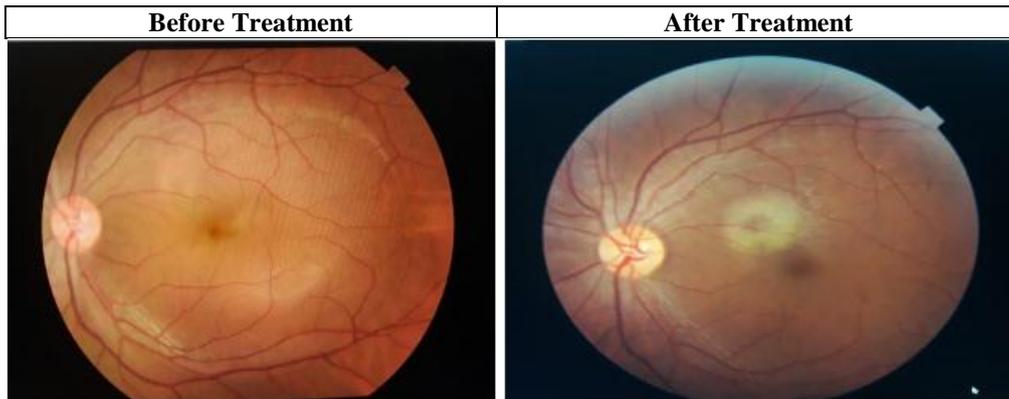
Scotoma {BT}	Left eye	Central huge scotoma
Scotoma {AT}		No scotoma

Table 10: Changes As Observed In Fundoscopic Examination.

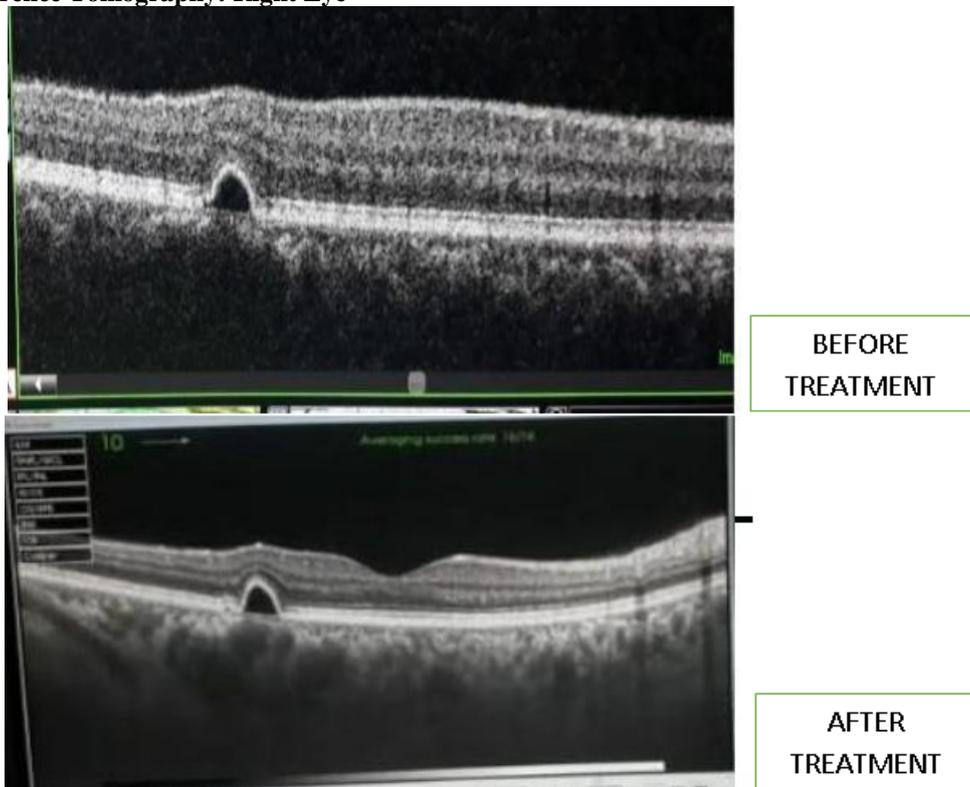
Before treatment	After treatment
Left Eye:- Dull macular reflex Background – sharp demarcated border covering the nasal part and the temporal part including optic disc suggesting CSR	Left Eye: - Macular reflex appreciated Reduced demarcation of the borders with the presence of febrins indicating resolving CSR

Fundus Photographs Before & After Treatment-Rigt Eye.

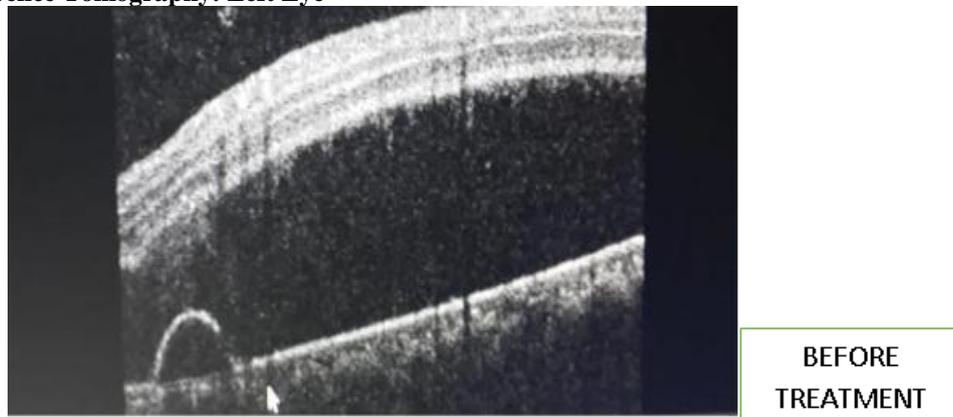
Fundus Photographs Before & After Treatment-Left Eye

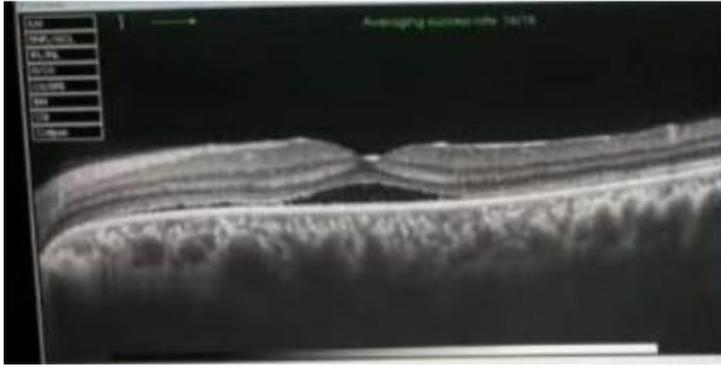


Optical Coherence Tomography: Right Eye



Optical Coherence Tomography: Left Eye





AFTER
TREATMENT

Secondary Opinion – Before and After The Treatment

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SRI SATHYA SAI INSTITUTE OF HIGHER MEDICAL SCIENCES, BANGALORE

OUTPATIENT MEMORANDUM

Patient ID: 105067030
Name: PANKAJRAMA B T
Gender: M
Age: 31 Y 11 M 3 D

Specialty: OPHTHALMOLOGY
Doctor: DR. KAUTHA RAO
Visit Date: 26-JUN-20

HISTORY
C/O Sudden drop in central vision since a week with marginal improvement attributable to a slight injury to the left eye. No drug intake or application for any other cause.

EXAMINATION
UNASSISTED VISION
R/E: 6/6
L/E: 6/6

RELATED FUNDUS
EXTRAFUSAL PED
CENTRAL SEROUS RETINOPATHY WITH PED
Large CSR

RIGHT EYE
PROCEDURES
Fundus Photograph: TAKEN
OCT: RE: SHOWS TEMPORAL PED. LE: SHOWS HUGE SERIOUS DETACHMENT WITH UNDERLYING PED

ADVICE
ADVICE: 1. ADJALAN EYE DROPS 2 TIMES A DAY FOR THE LEFT EYE FOLLOW UP 3 WEEKS LATER. TO REPEAT OCT AND DECIDE ON FFA

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122, 9P Main Road, Chamaraipet, BENGALURU - 560 018

MRD No. 106903/RE
Date: 26/6/20

Name: Mr. Pankajrama B T
Age: 31 Y 11 M
Ref. By: Dr. Mamatha

History & Complaints:
Diagnosed as CSR LE 3 months ago. Feels better.

	RIGHT	LEFT
Vision with PH:	6/6 N6	6/12 N10
I-OP		
Anterior Segment:	16/16	
Fundus:	PEED	CSR & Fibrosis

Diagnosis: R/E: Extrafusal PED L/E: Retroling CSR

Advice: OCT shows resolving CSR & Fibrosis

DISCUSSION

The plan of treatment planned in this case was mainly basis on dominant *doshas* in *Triteeya patalagata timira* which can be understood as *Kapha vataja* when patient complains of huge scotoma and *Vata Kaphaja* when complains metamorphopsia as a main complaint. In the current case as patient came with complaint of Scotoma followed by finger counting here *Kaphahara* treatment was adopted. The drugs and the treatment adopted are *Kaphahara*, *Rukshaka*, *Shothahara*, *Vatanulomana*, and *Drishtiprasadaka*.

CONCLUSION

Even though observation is first line of treatment in central serous retinopathy it takes three to six months to resolve itself in contemporary medicine, and Laser will be planned when it is large one like the present case, and patient was also told the same, considering these factors the condition progressed to resolving stage in 7 days.

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