

## MANAGEMENT OF CENTRAL SEROUS CHORIORETINOPATHY (CSR) IN AYURVEDA- A CASE STUDY

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Article Received on  
19 March 2019,

Revised on 09 April 2019,  
Accepted on 29 April 2019,

DOI: 10.20959/wjpr20196-14931

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### ABSTRACT

Central serous chorioretinopathy (CSR) is a non cystoids type of macular edema mostly affects young or middle age person. The disease occurrence is mostly unilateral. Though the disease is self limiting but due to recurrence and severity it may lead to permanent vision loss. Pathogenesis, sign and symptoms of CSR has similarities with Dhoomadarshi and Raktaja or Pittaja Abhisyanada. In contemporary medicine Anti VEGF injections, Intravitreal Triamcinolone and Photocoagulation are advised in this case. Here in this case study we have treated the case with Panchakarma, Kriyakalpa and internal medications based on Dhoomadarshi dristigata roga and Pitaja Abhisyanada chikitsa described in Sushruta Samhita. The patient was treated with Sneha Virechan, Tarpana Nasya, Ashyotana, Netra

pariseka, and oral medications like Amrutadi Guggulu for three months. Follow up was done in every 1 month interval and OCT was taken before and after completion of treatment. Significant improvement in vision in this case study led us to prepare a standard operating protocol for Ayurvedic treatment of all types of Macular Edema including cystoid macular edema (CME) and clinical significant macular edema (CSME) which are having even more vision threatening prognosis.

### INTRODUCTION

CSR is an idiopathic disorder typically affects one eye of a young or middle age person. This is non cystoid type of macular edema. It is the serous detachment of the sensory retina at

macula from RPE due to secondary leakages from choriocapillaries.<sup>[1]</sup> Symptoms include unilateral blurring of vision, Metamorphosia (distorted vision), micropsia (seeing objects smaller than normal) and mild dyschromatopsia (difficulty in color differentiation). Independent risk factors include steroid use, Cushing's syndrome, H. Pylori infection, pregnancy, psychological stress and sleep apnoea syndrome. Spontaneous resolution 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.<sup>[1]</sup> Multiple recurrent attacks may give similar effect. It can be correlated with Dhoomadarshi, an eye disease described under 12 Dristigata vyadhi and comes under Bahyapatalagata dosha (the disease Dhoomadarshi affects outer layers of retina) described by Sushruta.

### **CAUSES OF DHOOMADARSHI ACCORDING TO AYURVEDA<sup>[2]</sup>**

The person suffering from Dhoomadarshi gets smoky and blurred vision due to

1. Psychological factors like sorrows and grief
2. Physical diseases like fever
3. Excessive fatigue due to physical or mental strain
4. Diseases of head

### **Treatment methods**

1. Ghritapan
2. Virechan- Snigdha virechan
3. Nasya
4. Sita Pradeha- cold application to the body and head

### **CASE PRESENTATION**

Patient Name: Dr. XXX, Age: 34 Sex: Male

Address: Kabisuryanagar, Ganjam.

Treating Hospital: KATS Ayurveda College and Hospital, Berhampur, Dist-Ganjam, Odisha.

### **Chief complaints**

1. Unilateral (RE) blurring of vision since 15 days.
2. Smoky, cloudy vision
3. Dull central vision for RE -15 days
4. Diminish of vision for RE – 15 days

5. Heaviness of head since 15 days
6. Occasional blackout with distorted vision.

### History of Patient Illness

- H/O Present illness: patient's vision was normal before 15 days of occurrence of distorted, smoky, and cloudy vision.
- Patient had been under severe stress due to personal problem since 1 year before occurrence of this vision defect.
- Patient suddenly felt cloudy smoky vision one day morning, before night he took Tab. Viagra (Sildenafil) a sexual stimulant drug.

### Disease History

Past history: occasionally he felt blackouts since 1 year.

Not a known case of DM/ HTN/ Br. Asthma and other cardio vascular diseases.

- Family History: NIL
- Drug History: occasionally takes Sildenafil.
- Personal history: occasionally smoke and takes Alcohol.
- Treatment History: he was diagnosed as CSR and was advised Tab Meganeuron OD, Serax forte, FML E/D and Tear Plus E/D.

### PANCHA NIDAN (DIAGNOSIS)

- **Nidana/ etiology**

Kopa, Soka (Stress)

Swapna Viparya (irregular sleep habit)

Atimaithuna(Excessive Sex)

- **Purvaroop/ Prodormal symptoms:** TIA (Blackouts) and Headache

- **Roopa / Symptoms**

Unilateral blurring of vision (RE)

Smoky and cloudy vision

Metamorphosis (Distorted vision) (vyavidhha darshan)

### EYE EXAMINATION

- Visual acuity-RE- 6/18 LE-6/6

- Fundus examination – (Direct Ophthalmoscopy) - elevated, macular edema, no foveal shining and loss of foveal depression.
- OCT- Shallow separation of the sensory retina from the RPE. Cystoid type swelling at macula.
- Lab investigations: FBS, Lipid profile, Hb, Urine- RE/ ME – all were within normal limits.

### DIFFERENTIAL DIAGNOSIS

- CSR/ CME/ Eales' Disease
- Vataja Timir (1<sup>st</sup> Patalagata / 2<sup>nd</sup> Patalagat Timir)
- Dhoomadarshi

### DIAGNOSIS

Dhumadarshi (Pittaja Sadhya Dristigata Vyadhi) affecting 1<sup>st</sup> and 2<sup>nd</sup> Patala (Patalagata Timir).

### CHIKITSA (TREATMENT MODALITIES)

- **Virechan** (Therapeutic purgation) – Sneha virechan with Gandharvahastadi taila.
- **Nasya** : Tila Tailadi Yoga- 3 days (A.H.)
- **Anjan/ Eye drops- Chandanadi Anjana E/D** (Sahasrayoga) 1 drop thrice daily.

#### • Oral medications

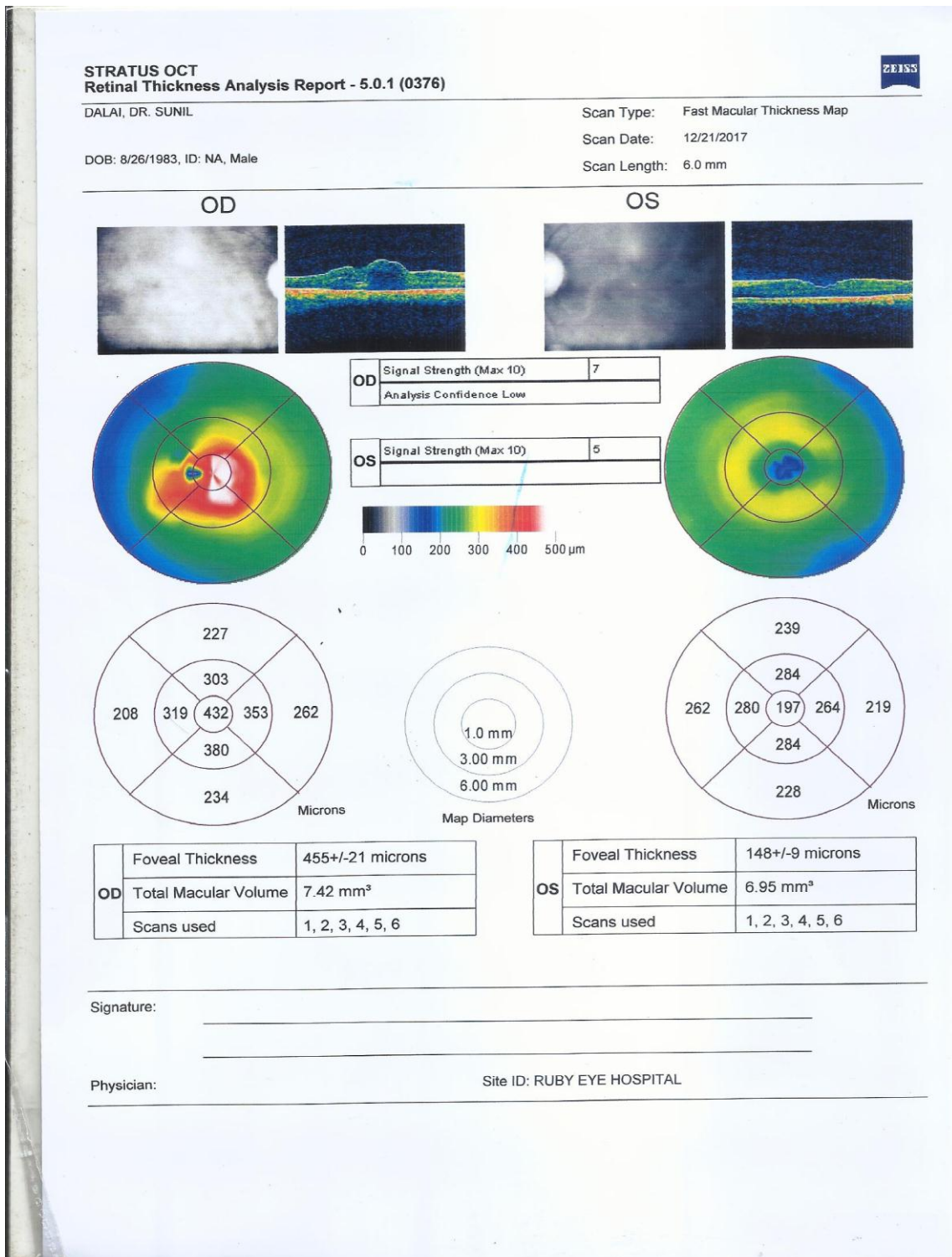
1. Amrutadi Guggulu 500mg BD for 3 months
2. Sameerapanchak Capsule 1 cap BD - 3months
3. Jathaveda Grita 10gm BD- 3 months
4. Saptamrutam Kashayam 15ml BD- 3 months
5. Triphala Churna 5gm before bed time daily with Luke warm water.

**NB:** Medicines No. 2, 3, 4 were procured from Sreedhariyam Ayurveda Eye Hospital, Kerala

## FOLLOW UP FINDINGS

Table No.1

DATE	VISUAL ACUITY		DIRECT OPHTHALMOSCOPY FINDINGS (RE)	OCT FINDINGS RIGHT EYE (OD)	SUBJECTIVE SYMPTOMS
	RE	LE			
21.12.17	6/18	6/6	Hazy and elevated macula. Loss of shining. Disc normal. No sign of hemorrhages.	Shallow separation of the sensory retina from the RPE. Cystoid type of swelling at macula. Complete loss of Foveal depression. <b>Foveal thickness- 455 +/- 20 microns</b> <b>Total macular volume- 7.42 mm<sup>3</sup>. [Figure 1]</b>	Vision cloudy Smoky vision Distorted vision
15.02.18	6/9	6/6	Mild Hazy and elevated macula.	-----	Mild cloudy vision, sometimes blackouts
15.04.18	6/6	6/6	Macula normal Optic Disc normal	-----	Normal vision
18.05.18	6/6	6/6	Macula normal Optic Disc normal	No serous fluid collection between RPE and sensory retina. Edema resolved. Normal foveal depression. <b>Foveal thickness- 138 +/- 10 microns</b> <b>Total macular volume- 6.44 mm<sup>3</sup> [Figure 2]</b>	Normal vision



**Figure 1- OCT Before treatment (Date-21/12/17).**



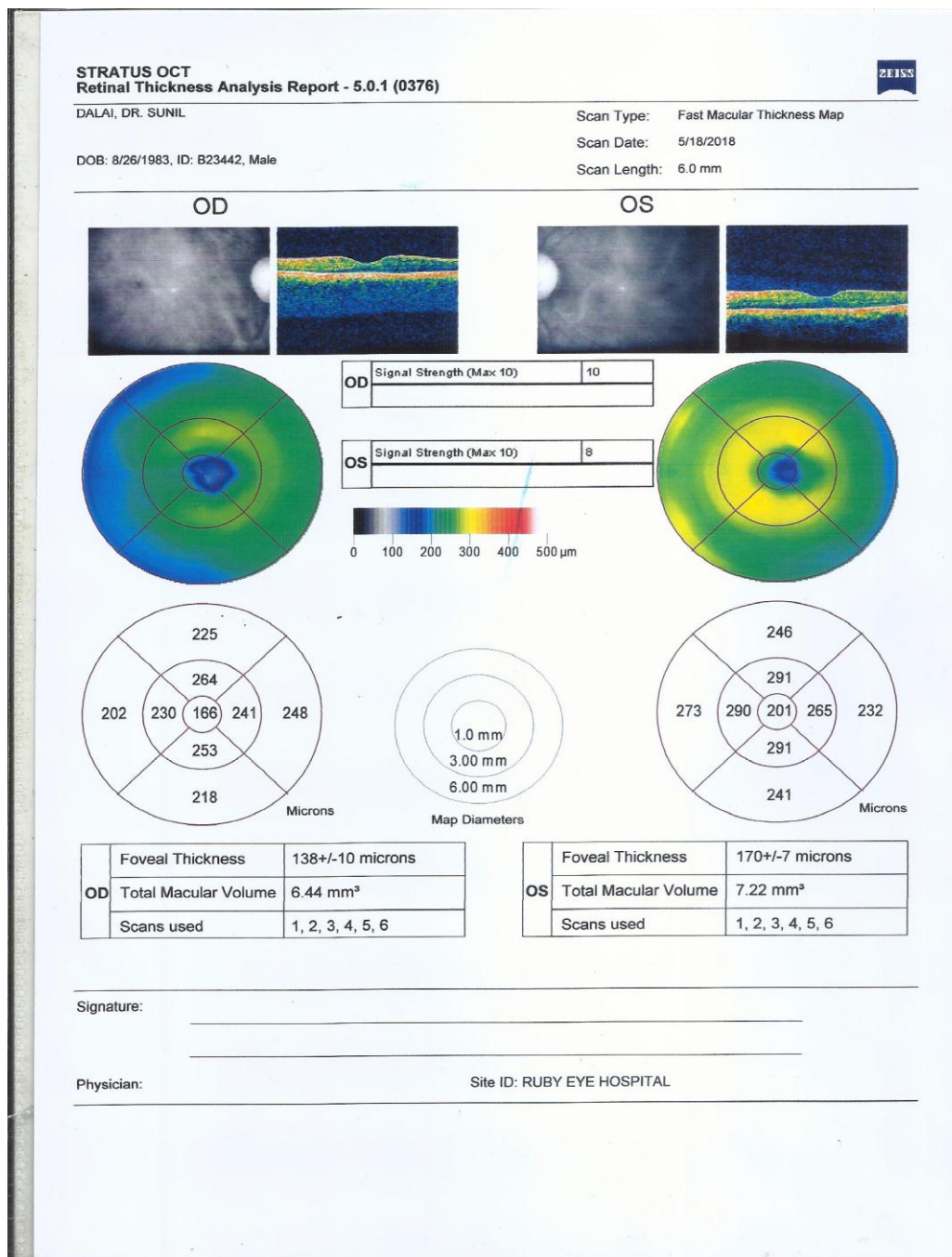


Figure 2- OCT After Treatment (Date-18/05/2018).

**RESULTS AND DISCUSSION**

CSR comes under 1<sup>st</sup> or 2<sup>nd</sup> Patalagata Timir as – in first patala the vision becomes avyakta (blurred vision) and in 2<sup>nd</sup> patala the vision reduced further and patient sees the objects as if covered by rain or cloud. Vata Pitta Samak and Kapha abiruddha treatment was done in this case of CSR. The whole treatment was done on the basis of *Sheeta chikitsa*. Same time eye has to be protected from Kapha- which causes Abhisyanada –thus Anjan was advised regularly. i.e Chandanadi Anjan. Dhumadarshi chikitsa with Pittasamak drugs and procedures

were done to prevent recurrences. Pittaja visarpa, pittaja abhisyanda, pitta vidagadha dristi, Raktaja abhisyanda treatment methods should be done in Dhumadarshi.<sup>[3]</sup> Gritapana, Snigdha virechan, Sheeta pradeha are advised in dhoomadarshi chikitsa. (A.S.U.16/24). After the treatment vision of the patient become 6/6 for both eyes. Quality of vision improved and there was no Smoky or cloudy vision felt by the patient. Foveal thickness and macular volume in OCT findings has been reduced significantly. (Table-1).

Agnimandya leads to Ama formation and ultimately Ama causes various reactions inside the body at cellular level and deranges the three *doshas* in their proportion in quantity and quality. Ama causes *Srotodusti* and *Sira abhisyandam*, which are the main pathological process for initiation of eye diseases.<sup>[4]</sup> Due to the interconnection of pitta and rakta, vitiated pitta also affected the raktavaha srotas. In this context of Sira abhisyandam in eye diseases the Asrya sthana is Srotas, affected dhatu is Rakta and vitiated dosa is Pitta.<sup>[5]</sup> Pathogenesis of CSR or other macula edema involves Agnimandya, Dhatukshya, Raktapitta and Avarana pathology. *Agnimandya* at tissue level is called *Dhatwagnimandya*. With proper dipana pachana drugs, like *Trikatu churna*, *Jatharagni* as well as *Dhatwagni* can be corrected as per individual requirement. *Sodhan chikitsa* are important part of all the *Ayurvedic* therapies. Due to *dhatwagnimandya*, accumulation of impurities occurs at the *srotas* or capillary level. For this *Virechan* was given. *Nasya* with oil prepared from *chakshyusya* drugs should be done for *urdhwajatrugata srotas sodhan*.

As *Nasya* is one of the major treatment procedures in diseases above the clavicle, hence in this case *Tilatailadi Nasya* was administered for therapeutic effect. In *Nasya karma*, the medicine that is put into nostrils moves in the channels upto *Shringataka Marma* (Cavernous Sinus) and then spreads to whole of the interior of head and to junction place where all channels related to eyes, ears, throat situated together, thus shows influences on *Shiras* by removing out the accumulated *Doshas* localized in *Shiras*. The drug administered even enters into the systemic circulation and also direct pooling into the intracranial region by both vascular and lymphatic path. Hence *Tilatailadi Nasya Yog* was selected which conatains *Bibhitaka*, *Bhringaraja*, and *Vijayasra*, all are having *Chakshyusya* and *Raktapittasamaka* actions. *Tilatailadi* formulation has been used as *Nasya* for vision improvement. *Bibhitaka*<sup>[6]</sup> and *Bringaraja*<sup>[7-9]</sup> have *Chakshushya* properties whereas *Vyavayee guna* of *Tila taila*<sup>[10]</sup> attributed to penetration of drugs to retinal layers improves microcirculation in retina.



Medicines like capsule Sameerapanhak and Saptamrita Kashayam have Raktapitta samaka/prasadak action which not only has healing properties on tiny blood vessels of retina but also reduces edema in macula. Amrutadi guggulu has anti-inflammatory effect on retina. Triphala has anti VEGF activity<sup>[11]</sup> and has best vatanulomaka and chakshyusya properties.

## CONCLUSION

Though CSR is self limiting disease treatment has to be done to protect gradual degeneration of photoreceptors and RPE which causes permanently reduced vision. Daily mild Virechan drug like Triphala Churna has to be advised. Daily Gritapana- Triphala Ghrita / Jeevantiyadi Ghrita/ Patoladya Ghrita has to be continued. Nasya is one of the major procedures where even drug can be cross blood brain barrier (BBB) and blood retinal barrier (BRB). Nasya do both Dosha Sodhan and Shaman. Divanidra(Day Sleep) and Ratri jagaran (Night awakening) both should be avoided. As the improvement in vision in this case is significant, more number of cases of different types of macular edema can be treated with these methods.

## REFERENCES

1. Brad Bowling, Kanski's Clinical Ophthalmology, 8<sup>th</sup> edition, Elsevier publications, 2016, Page No-624.
2. Trikamji J, Ram N, editors. Commentary Nibandha Sangraha of Dalhana on Susruta Samhita of Susruta, Uttarantra; Dristigata roga Vijnaneeyam. 1<sup>st</sup> ed., Ch. 7, Verse 39. Varanasi: Chaukhambha Sanskrit Sansthan; 2012. p. 609.
3. Trikamji J, Ram N, editors. Commentary Nibandha Sangraha of Dalhana on Susruta Samhita of Susruta, Uttarantra; Dristigata roga Vijnaneeyam. 1<sup>st</sup> ed., Ch. 10, Verse 16. Varanasi: Chaukhambha Sanskrit Sansthan; 2012. p. 614.
4. Sahoo Prasanta Kumar, Fiaz Shamsa, Clinical study on efficacy of Panchatikta Basti, Tilatailadi Nasya and Amrutadi Guggulu in the management of diabetic retinopathy, Int. J. Ayur. Pharma Research, 2016; 4(7): 58-64.
5. Santhakumari.P.K, A text book of ophthalmology in Ayurveda, 2<sup>nd</sup> Edition, Page. No- 219-221.
6. Chunekar K.C, Bhavaprakash Nighantu, Choukhamaba Bharati Academy, Edition 2010, Reprint 2013, Haritakyadi Varga, Page.No- 09.
7. Chunekar K.C, Bhavaprakash Nighantu, Choukhamaba Bharati Academy, Edition 2010, Reprint 2013, Guduchyadi Varga, Page.No- 414.

8. Sharma P.V. Classical uses of medicinal plants, Choukhamba Viswabharati Publications, Edition: Reprint: 2004, page.No-663.
9. Rownak Jahan et al, Ethnopharmacological Significance of *Eclipta alba* (L.) Hassk. (Asteraceae). <http://dx.doi.org/10.1155/2014/385969>.
10. Chuneekar K.C, Bhavaprakash Nighantu, Choukhamba Bharati Academy, Edition 2010, Reprint 2013, Taila Varga, Page.No-763.
11. Gopinathan G, Dhiman KS (2013) Triphala in Eye Diseases: A Critical Review. *J Homeop Ayurv Med.*, 2: 123. doi:10.4172/2167-1206.1000123.