

AYURVEDIC MANAGEMENT OF CENTRAL SEROUS RETINOPATHY - A CASE STUDY

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ABSTRACT

Central serous retinopathy (CSR) is also known as central chorioretinopathy (CSC), is a visual impairment condition characterized by fluid accumulation resulting in a localized macular detachment and blurred vision or distorted central vision. 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. Complete resolution occurs in most of the patients in three to six months but most of the patients unwilling to wait or in those with immediate occupational demand. Observation and laser photocoagulation are the only treatment in contemporary science. This condition shows the feature *Vimarga gamana* and vitiation of *Vata pradhana Pitta-Kapha dosa* so treatment is planned according to *Samprapti* of the disease, A 46 year old male patient with central serous retinopathy showed marked improvement in Ayurvedic management is presented in this article.

KEYWORDS: Central serous retinopathy, Hyperpermeability, *Vimarga gamana*, *Vata pradhana Pitta-Kapha dosha*.

INTRODUCTION

Central serous retinopathy is an Idiopathic disorder characterized by a localized serous detachment of the sensory retina at the macula secondary to leakage from the choriocapillaries through one or more hyper permeable RPE sites. CSR typically affects one eye of a young or middle (20-50 years) aged, males more than females^[1].

The Incidence of CSR is said to be 10 in 100,000. There does not appear to be any clear predisposing factors^[2], Imperfectly defined risk factors include Steroid administration, Helicobacteria pylori infection, Pregnancy, Psychological stress

and Sleep apnoea syndrome. Clinical features are unilateral blurring, metamorphopsia, micropsia and mild dyschromatopsia signs are round or oval detachment of the sensory retina at the macula, subretinal fluid may be clear or turbid.

Management is observation, Laser to the RPE site of the retina, Photodynamic therapy (PDT), Intravitreal anti-VEGF agents^[1] but in observation, duration is long(3-6 months) patient may unwilling and remaining methods are expensive and has their own complications such as Geographic atrophy of the pigment epithelium and choriocapillaris,

fibrovascular scar etc^[3]. Ayurveda is mainly based on *Tridosha siddhantha*^[4] any disease can be treated on the basis of this, the Etiopathogenesis involves vitiation of *Vata pradhana pitta-kapha dosha*, where *Vimargamana*, extravasation of vessels and fluid accumulation takes place respectively so Ayurvedic management in this case study showed marked improvement.

CASE

Chief complaint: C/o Blurred vision in Right eye since one month.

History of present illness: A 46 year old male patient with history of diabetes since 4 years came to outpatient department for sudden onset of diminished vision of right eye since one month (CF at 5mts) associated with metamorphasia, OCT of right eye showed macular oedema, retinal thickening.

Past history: Diabetic since 4 years under medication T. Metformin, No H/O Hypertention, he didn't took laser treatment for another opinion he approached for Ayurvedic treatment.

Laboratory investigation:

FBS:180 mg/dl Date: 15/9/2016

PPBS: 220mg/dl

Family history: Nothing specific

Personal history: Appetite: Reduced

Bowel: Twice daily

Sleep: Disturbed

Micturation: 5-6 times daily

General examination

CNS: consciousness, memory, higher motor mental function intact

CVS: NAD

Examination of the eye

Anterior segment: Normal

IOP: Normal

Fundus examination: Elevated area on macular region, optic cup and optic disc ratio was normal.

Visual acuity

Before treatment	DV	NV	PH
RE	CF-5 mts	N-36	CF-5 mts
LE	6/9	N-8	6/9

DV- Distance vision, NV- Near vision, PH- Pin hole

Treatment planned

Chitrakadi vati 1-1-1 before food days^[5]

Takradhara^[6] with Musta, Aamalaki, Punarnava, Manjishta, and Haritaki churna for 7days 2 course

Nisha-amalaki churna 1tsp-0-0 before food^[7]

RESULT

After treatment	DV	NV	PH
RE	6/36	N-36	CF-5 mts
LE	6/9	N-8	6/9

DISCUSSION

Line of treatment planned on the basis of vitiation of *Doshas*, here involvement of *Vata* because of *Vimargamana*, *Pitta* due to vitiation of *Rasavaha and Raktavaha srotas* (extravasation of vessels) and *kapha* is due to accumulation of fluid. So *Vatanulomana*, *Rakta prasadan* and *Shophahara*[Anti-inflammatory] are followed and advised to avoid emotional stress and unhealthy diet.

Initially *Ama pachana* with *Chitrakadi vati* as it contains *chitraka*, *pippali*, *ksharas*(yava and sarja), *panchalavanas*-absorbes the excess superficial water content^[8], *Trikatu* helps in *Shophahara* as well as *dipana* and *pachana*^[9].

Then *Takradhara* (pouring of medicated butter milk over forehead) is adopted because *Dhara kalpa* having *Dhatu drudata* (tissue strengthening), *Indriya patava*^[6] and procedural effect of *Shiradhara* may act as

relaxation response irrespective of *Dravya* (medicine) used. Trauma to the *Marmas* is one of the cause for edema^[10] so *Manasika factors* (Stress, Anxiety etc affects *Shira* (head), is one of the *Marma* (vital organ) and it as *Adhishtana* (location) of *Chakshuredriya*, the procedure checks the retinal extravasation and also Anti stress activity was also been noted by many research workers^[11] and stress being one of the major risk factors in central serous retinopathy,

Takra dhara also strengthens the *Netra*, *Takra dhara* has property *Netra prakasho agada*(doesnot occur any dieases) medium it has *Pancha rasa* except *Lavana rasa*, *Ruksha guna*, *Amla vipaka*, *Ushna veerya* subsides *kapha* ,*Madura* and *Amla rasa* subsides *Vata* and also *Takra* contains large amount of lactic acid, is a good vehicle for trans-dermal absorption of drugs. The efficacy of lactic acid contains products is linked to their ability to deliver it to specific skin stratum^[11].other ingredients such as *Musta*, *Manjishta*, *Amalaki* and *Punarnava churna* (powders) .

Musta is having *Laghu* and *Ruksha* property absorbs all the water content form *Meda* and *Kapha* and anti-inflammatory and antioxidant properties^[13], *Amalaki* has anti-inflammatory and antioxidant properties helps to reduce the oedema^[14],*Punarnava* is also having Anti-inflammatory, Anti-stress and antioxidant activities^[15] *Manjishta* has Anti-inflammation effect, Neuroprotective and antioxidant property^[16], the paste of the *Haritaki* effectively reduces the swelling and hasten the healing^[17].

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, but in this case study CSR resolved in one month by *Takradhara* as it is found to be stress reliving factor and subside the edema.

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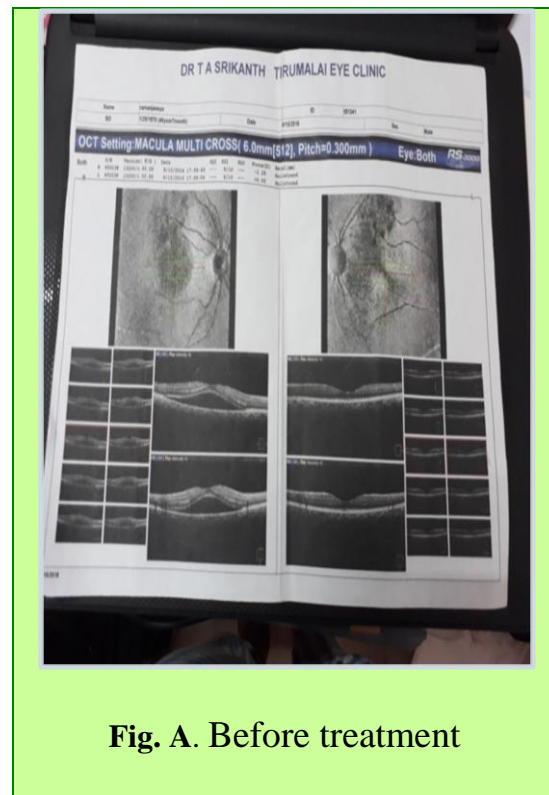
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Fig. A shows the fluid accumulation (CSR) in the fovea, and **Fig. B** shows resolved foveal CSR



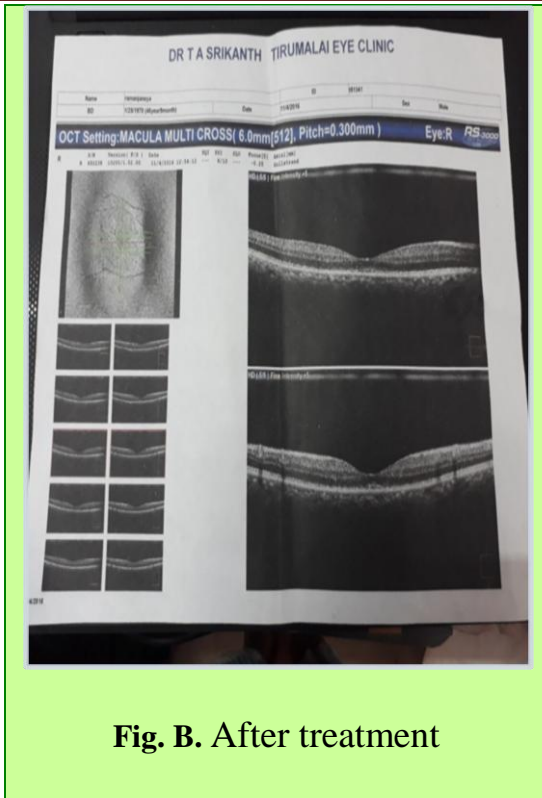


Fig. B. After treatment

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