

COMBINED EFFECT OF MARMA THERAPY AND AYURVEDIC MEDICINES ON CYSTOID MACULAR OEDEMA - A CASE REPORT

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ABSTRACT

Cystoid Macular Oedema or CME is a painless disorder that affects the central retina or macula. It describes the development of a fluid-filled cyst as a result of fluid buildup in the retina's inner nuclear layer and outer plexiform layer. Vision that is blurred or wavy near or in the centre of our field of vision is the main symptom of macular oedema.

Main Clinical findings: A female patient of 50 yrs. presented in Shalaky OPD No. 5 of Rishikul Ayurvedic Medical College UAU Dehradun with symptoms of blurred vision and eye twitching in her left eye for six months after her Lasik surgery. **Diagnosis:** The patient was diagnosed with cystoid macular oedema in the left eye for which she was given **Anti-vegf injection(Avastin)** but did not find much relief. **Interventions:** The principles of *Vataja Timira*, *Sotha* were followed and *Ayurvedic* medicines and *Marma* therapy was given.

Outcome: Patient got Significant result by improving quality of vision and also in eye twitching. **Conclusions:** The Present case foreshadows the successful method of *Ayurveda* science in treating macular oedema. This further demonstrates the link between macular oedema and the methods used to cure it.

KEYWORDS: Cystoid macular oedema, Lasika surgery Complication, *Shopha*, *Vataja Timira*, *Ayurveda*, *Marma*.

INTRODUCTION

The macula, the central part of the retina, aids in tasks requiring fine details like reading and driving by playing a crucial role in acute and detailed vision. Macular oedema is an increase in retinal thickness at the macula caused by disruption of the normal blood-ocular barrier, which results in fluid buildup in intracellular spaces of the retina, primarily in the outer plexiform layer and the inner nuclear layer.^[1] Presentation is with the blurring of vision especially for near tasks, and sometimes distortion.

Visual loss occurs because of this phenomenon as distortion of architecture of photoreceptors occurs. It is the last common pathway of numerous processes, including diabetic retinopathy, adverse drug reactions, inflammatory, post-cataract, retinal dystrophy, intraocular tumours, and age-related macular degeneration. In developed world Cystoid Macular Oedema (CME) is leading cause of loss of central vision.^[2] The absence of a lymphatic system in the eye and the transcapillary hydrostatic pressure differential and effective osmotic pressure difference are the two main forces that propel fluid through capillary walls.^{[3],[4],[5]} Its pathophysiology discusses a number of processes, including cytotoxic (Muller cell malfunction), hyperpermeability, and leukostasis. Allopathic treatment includes topical steroids, posterior periocular injections, laser photocoagulation, and systemic carbonic anhydrase inhibitors.^[6] In the Allopathic system of medicine the objective assessment of retinal thickness provided by optical coherence tomography (OCT), which also interacts with visual acuity and conveys absolute structural knowledge, has become the standard for both diagnosis and therapy.

According to *Acharya Sushruta*, *Vataja Timira* is one of the *Drishtigata Rogas*, which is comparable to CME in which the patient perceives everything as *Bhramantiva*, *Aavila*, *Arunabhani*, and *Vyavidhani*.^[7]

CASE REPORT

Basic information of the patient, Age: 50 yrs, Sex: Female, Religion: Hindu, Occupation: House-wife.

Chief Complaints: Patient complaints of blurred vision and eye twitching in her left eye for 6 months.

History of present illness

According to the patient, she was asymptomatic for 1 year and 2 months before gradually developing painless vision blurring and left eye itching. The patient had allopathic treatment at a neighbouring clinic, underwent Lasik surgery at the Shri Krishna Eye Institute and Hospital in Haridwar to treat visual loss. Six months later, she experienced blurring of vision and persistent eye twitching. After a full eye examination at Shri Krishna Eye Institute and Hospital, she was diagnosed with CME (left eye). She underwent allopathic treatment as well as Antivegf injection therapy (avastin), but only experienced mild relief.

Patient arrived at RAMC on October 27, 2022, with all of these complaints, in order to receive better care.

History of past illness: The patient is a known case of.

- ✦ H/O OF TYPE 1 DIABETES MELLITUS – 10 Years (on medication).
- ✦ H/O OF HYPERTENSION – 10 Years (on medication).
- ✦ H/O OF HYPERTROPHIC CARDIAC- MYOPATHY – 1 Year (on medication).
- ✦ H/O OF HEMIPLEGIA- 8 years back.

Family history: Patient's Mother is a known case of Diabetes Mellitus for 30 years for which she was taking medicines and was under control.

Examination Systemic examination

Central Nervous System: Nothing significant.

Respiratory System: Nothing significant.

Cardiovascular System: The patient is a known case of Hypertrophied Cardiac Myopathy for 1 year for which she was taking medicines.

Gastrointestinal Examination: Nothing significant.

EYE EXAMINATION

Head Posture	Normal Posture	
Visual Acuity	RE	LE
Distant vision	6/9 P	CF 1m
Pin hole	No improvement	No improvement
Near vision	N.36	N.36

TORCH LIGHT EXAMINATION		
	OD	OS
Eye brows	Normal	Normal
Eye lashes	Normal detected	Normal detected
Lid margin	Regular	Swollen (upper eye lid)
Lids	Normal	eye twitching (10-12 times/min)
Palpebral& Bulbar conjunctiva	Normal	Normal
Cornea	Clear transparent	Clear transparent
Pupil	NSNR	NSNR
Iris shadow	Not seen	Not seen
Lens	Greyish Black	Greyish Black

SLIT LIGHT EXAMINATION		
	OD	OS
Eye brows	Normal	Normal
Eye lashes	Normal detected	Normal detected
Lid margin	Regular	Swollen (upper eye lid)
Lids	Normal	Normal
Palpebral& Bulbar conjunctiva	Normal	Normal
Cornea	Clear transparent	Clear transparent
Pupil	NSNR	NSNR
Iris shadow	Not seen	Not seen
Lens	Greyish Black	Greyish Black
Distant direct ophthalmoscopic examination		
	OD	OS
Media	Clear	Clear
Optic disc	No demarcation in disc margin	No demarcation in disc margin
Size	Normal	Normal
Shape	Round	Round
Colour	Pale pink	Pale pink
Macula	Dull Foveal Reflex	Foveal reflex absent, edema present
Blood vessels	Normal pattern	Normal pattern
General Background	WNL	WNL

INVESTIGATIONS

Hb

Blood sugar level

HbA1c test

OCT imaging was done

Diagnosis: **Cystoid macular oedema (Lt.Eye)**

Treatment Protocol: After diagnosis of disease drug of choice was given accordingly keeping *Dosha, Dushya, Shrotas* involved (*Sampraptighataka*) in mind and following medicines were prescribed during first visit.

27 October 2022	Patient presented Rishikul Ayurveda Medical College, UAU, Dehradun with persisting complaints of blurred vision and Eye twitching in left eye.	
First visit	<p>Diagnostic testing Before therapy(27 Oct 2022) Visual acuity: OD- 6/9P OS-CF1m Pin hole : OD- NI OS- NI Near vision-N.36 Colour vision- Normal</p> <p>After Therapy (6 Nov 2022) Visual acuity: OD- 6/9P OS- CF 1m Pin hole : OD- NI OS- NI Near vision- N.18</p>	<p>INTERVENTION (Same for During and After Therapy) For <i>Deepan & Pachan</i>: <i>Chitrakadi Vati</i> 1 tid b/f with luke warm water -3 days Tab <i>Punarnava Mandur</i> 250mg BD- 15 days Tab <i>Saptamrita Lauha</i> 1 tab BD – 15 days <i>Shastishali Pinda sweda</i>- 7 days(Therapy) <i>Marsha Nasya</i> with <i>Sheerbala Taila</i>- 7 days (6 drops in each nostril) (Therapy)</p> <p>Stimulation of <i>Marma</i> points- <i>Apanga</i>, <i>Avarta</i>, <i>Shringataka</i>, <i>Sthapni</i> (2 times per day)</p>
	Colour vision- Normal	
15 November 2022	<p>Diagnostic testing Before therapy(15 Nov 2022) Visual acuity: OD- 6/9P OS-CF1m Pin hole : OD- NI OS- NI Near vision-N.18 Colour vision- Normal</p> <p>After Therapy (24 Nov 2022) Visual acuity: OD- 6/9P OS- CF 1m Pin hole : OD- NI OS- NI Near vision- N.10 Colour vision- Normal</p> <p>Patient got good relief in eye twitching</p>	<p>INTERVENTION Treatment During Therapy: Tab <i>Punarnava Mandur</i> 250mg BD- 7 days Tab <i>Saptamrita Lauha</i> 1 tab BD – 7 days <i>Shastishali Pinda sweda</i>- 7 days(Therapy) <i>Marsha Nasya</i> with <i>Sheerbala Taila</i>- 7 days (6 drops in each nostril) (Therapy)</p> <p>Stimulation of <i>Marma</i> points- <i>Apanga</i>, <i>Avarta</i>, <i>Shringataka</i>, <i>Sthapni</i> (2 times per day)</p> <p>After Therapy Treatment: Tab <i>Saptamrita Lauha</i> 500 mg 1 tab BD -7 day Tab <i>Rasrajrasa</i> 125mg BD with honey- 7 days Stimulation of <i>Marma</i> points- <i>Apanga</i>,</p>
Second visit		

		<i>Avarta, Shringataka, Sthapni</i>
02 December 2022 Third visit	Diagnostic testing Before therapy(02 Dec 2022) Visual acuity: OD- 6/9P OS-CF1m Pin hole : OD- NI OS- NI Near vision-N.10 Colour vision- Normal After Therapy (10 Dec 2022) Visual acuity: OD- 6/9P OS- 6/24 Pin hole : OD- 6/6 OS- 6/12 Near vision- N.10 Colour vision- Normal	INTERVENTION Treatment During Therapy: Tab <i>Rasrajrasa</i> 125mg BD with honey- 7 days Tab <i>Saptamrita Lauha</i> 1 tab BD – 7 days <i>Shastishali Pinda sweda</i> - 7 days <i>Marsha Nasya</i> with <i>Sheerbala Taila</i> - 7 days (6 drops in each nostril) Stimulation of <i>Marma</i> points- <i>Apanga, Avarta, Shringataka, Sthapni</i> After Therapy Treatment: Tab <i>Saptamrita Lauha</i> 1 tab BD -7 day Tab <i>Punarnava Mandur</i> 250mg BD- 7 days Stimulation of <i>Marma</i> points- <i>Apanga, Avarta, Shringataka, Sthapni</i>
Patient got good relief in blurring of vision and eye twitching Patient is adviced to repeat OCT after 1 week		

DISCUSSION

The patient's main complaints upon arrival were 6 months of left eye twitching and blurred vision. Testing is used to rule out any further ocular disorders. A diagnosis of *Vataja Timira (Drishtigata Vyadhi)* was made after an evaluation, with particular attention paid to Cystoid Macular Oedema and *Drishti Ashrita Shotha*. It is *Prathampatalgata (Tejojalashrita)*, *RasRakta Dhatu Dushtijanya Vyadhi*, based on the symptoms. Line of treatment was carried out as necessary. *Marga Vishodhana* was initially carried out as a result of *Vatta anulomana*, *Raktapitta Nashaka Chikitsa*, and *Shoshana Chikitsa* were carried out to absorb inflammatory cells because, in modern terms, it is an inflammatory disease, *Brimhana Chikitsa* and *Rasayan Chikitsa* were also carried out to remove the *Vranan Vastu* created during the inflammatory process.

Probable mode of action: *Chitrakadi Vati*^[8]: - was given for *Ama Pachana* and *Vatanulomana* action. *Shamanoushadis: Punarnava Mandur*^[9] is helpful in drainage of fluid accumulated and also helpful to cope up VEGF and ischemic assault of retina and choroid (Internal retinal barrier breakdown, increase in vascular permeability and neovascularisation) and is *Rasayana* for tissue damage as it has capacity to regenerate. *Saptamrita Lauha*^[10] is a *Chakshusya, Rasayana* and is helpful in *Shotha* and Oedema. *Rasrajrasa*^[11] balances the *Vata*

dosha and by the virtue of the anti-oxidant and anti-inflammatory properties protect the body against free radicals and oxidative damage and helpful in reduce *Sotha* and Oedema.

Nasya: *Nasya* is given to bring *Pitta Vata Shaman* in *Drishti* and does *Indriya Dridakarana*.

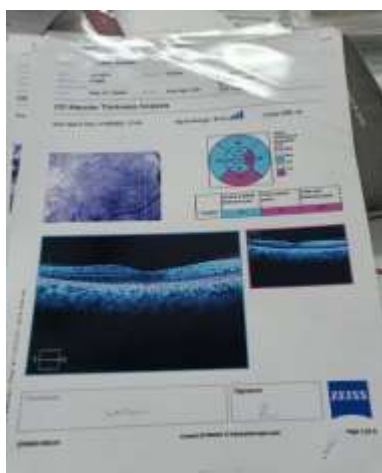
Shastishali Pinda sweda: *Shastishali Pinda sweda* has the *snigdha*, *laghu*, etc *guna* and *Brihana* like *Karma*. It works by the virtue(*Guna*) of its properties thus mitigate *Vata* and bring it back to normalcy. As a *Brihana Karma* property it also provide nutrition to the tissue which are undergoing depletion and degeneration.

Marma points- *Apanga, Avarta, Shringataka, Sthapni, Vidhura*.

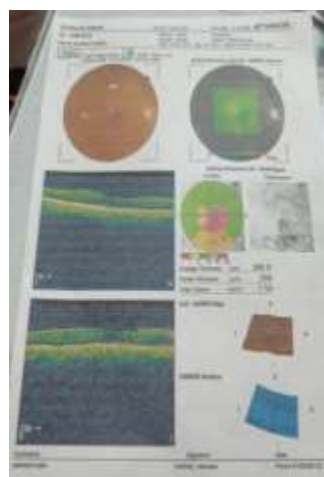
Marma Chikitsa/ Marma Therapy is an ancient practice whose focus is the manipulation of subtle energy (*Prana*) in the body for the purpose of supporting the healing process.^[12] *Marma Therapy* when acts on *Vimargamanain, Roopvahi, Rasavahi, Raktavahi Srotas*, there is *Poshan* of these *Srotas*. On the other hand *Marma* therapy removes *Sanga* on application of pressure on respective points that leads to *Anulomana* of *Vata Dosha*. Both of these causes *Sroto shudhi* that causes alleviation of *Tridosha* with predominance of *Vata*. Ultimately there is elimination of *Sthanasamshriya* of vitiated *Doshas* in *Patalas* and easy availability of nutrients to *Patalas*.

CONCLUSION

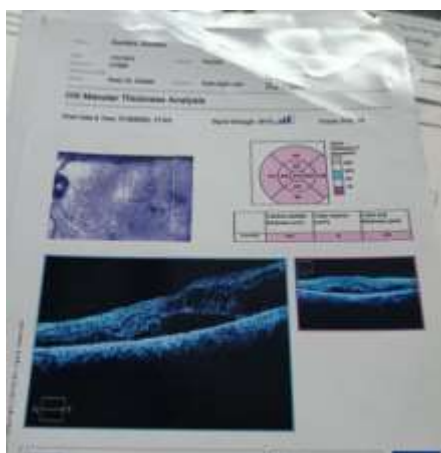
Cystoid macular oedema is considered a major vision threatening disease. But *ayurvedic* medicines have a good role in many ophthalmic diseases. A well planned combined therapy can result in good out comes with patient satisfaction. *Ayurvedic Marma* therapies along with *Netra Kriya Kalpas* and *Shamanoushadis* in a planned way is found to be effective in treating Cystoid Macular Oedema with a better visual outcome.

OCT Findings Before and After treatment

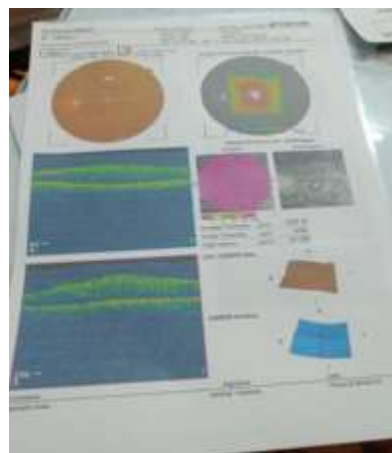
OCT RE 18/7/2022
Central thickness 273



OCT RE 31/12/2022
Central thickness 269



OCT LE 18/7/2022
Central thickness 610



OCT LE 31/12/2022
Central thickness 496

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