

**EFFECT OF JALAUKAVACHARANA IN CENTRAL RETINAL VEIN OCCLUSION
(CRVO) - A CASE STUDY****¹Dr. Mehjabeen Mohammad Yunus Quraishi and ²Dr. A. P. Vaijwade**¹PG Scholar, Shalakya Tantra Department, Government Ayurveda Medical College and Hospital, Nanded.²Associated Professor, Shalakya Tantra Department Government Ayurveda Medical College and Hospital, Nanded.***Corresponding Author: Dr. Mehjabeen Mohammad Yunus Quraishi**

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ABSTRACT

Central retinal vein occlusion (CRVO) is a retinal vascular disease. CRVO is one of the common diseases presenting to emergency in *shalakya* and leading cause of painless vision loss. Incidence is 7 people per 10000. It present with sudden, unilateral blurred vision to a moderate-severe degree. Ischaemic CRVO constitutes about 20-25 percent of all cases of CRVO while the majority (75-80%) of eyes with CRVO are of the non-ischaemic type. The present study deals with the patient of non-ischaemic type. The management of CRVO using various drugs is still uncertain. Various modulators of the hemorrheological factors have been tried such as anticoagulants, thrombolytic and hemodilution but none of them is of proven beneficial so far. Generally the patients are gone for modern medications but repeated USG may ignore a retinal tear or detachment and deny vitrectomy that is the only treatment for serious forms. In Ayurveda, CRVO is caused due to *Raktavaha Sroto Dushiti*. Hence treatment was based on *Raktapitta Shodhana* and *Shamana*. The patient of 58 years old came with complaints of sudden left eye vision loss. He was treated with *Punarnava guggul*, *Saptamrut loha*, *Haritaki Churna* with procedures of *Jalaukavacharna*. At the end of treatment left eye visual acuity was improved. Fundus examination revealed resolving of retinal haemorrhages. Observations showed that *Ayurvedic* approach is helpful in managing CRVO.

KEYWORDS: *Ayurveda*, CRVO, *Jalaukavacharana*.**INTRODUCTION**

Central retinal vein occlusion (CRVO) is a common retinal vascular disorder.

Clinically, CRVO is one of the major causes of severe vision impairment and blindness. The fundus may show retinal hemorrhages, venous stasis, dilated tortuous retinal veins, cotton-wool spots, macular oedema, and optic disc oedema that create a dramatic appearance, often called “the blood and thunder” fundus. Broadly, CRVO can be divided into 2 clinical types, ischemic and non-ischemic. Non-ischemic CRVO is the milder form of may present with good vision, few retinal haemorrhages and cotton-wool spots, no relative afferent pupillary defect, and good perfusion to the retina. Non-ischemic CRVO may resolve fully with good visual outcome or may progress to the ischemic type. Ischemic CRVO is the severe form of the disease.

CRVO constitute the second most common retinal vascular disorder. The non-ischemic type is more common than the ischemic type. Non-ischemic CRVO may resolve completely without any complications in about 10% of cases. Arteriosclerotic changes in the central retinal artery transform the artery into a rigid structure, causing hemodynamic disturbances,

endothelial damage, and thrombus formation. This mechanism explains the fact that there may be an associated arterial disease with central retinal vein occlusion (CRVO).

CRVO

Definition: CRVO is a blockage of the vein that causes the vein to leak blood and excess fluid into the retina. This fluid often collects in the area of macula. When the macula is affected central vision may become blurry.

Etiology

- Diabetes mellitus
- Hypertension
- Bleeding or Clotting disorders
- IHD
- Glaucoma
- Compression of vein
- Haemodynamic disturbances
- Vessel wall changes
- Changes in blood

ACCORDING TO AYURVEDA

In order to understand the *Samprapti* of Central Retinal Vein Occlusion in *Ayurveda*, general *Samprapti* of eye

disease must be considered. *Nidana* of endogenic eye diseases are mainly *Achakshushya* factors which vitiates *Pitta*. Due to interconnection of *Pitta* and *Rakta*, which share common *Ashrya Ashrayee bhava*, the *Raktavaha srotas* also gets vitiated due to *Pitta* vitiation. As the *Nidana* factors are *Achakshushya*, the vitiated *Pitta* and *Rakta* have an affinity towards penetrating the eyes. Hence the vitiated *Dosha* move towards the eyes through *Jatruordhwa Srotas* and finally gets confined to the eyes, there is a stage when the *Siras* are deeply involved which is known as *Sira Abhisyanada*. The whole pathology of Central Retinal Vein Occlusion which starts with *Srotodusti* of *Raktavaha Srotas* manifested in the form of haemorrhages (Tomato splash appearance or flame shaped). In this context of *Siro Abhisyanada* in eye diseases the *Ashraya Sthana* is *Rasavaha Srotas*, affected *Dhatu* is *Rakta* and vitiated *Dosha* is *Pitta*.

TYPES

1. Non ischaemic
2. Ischaemic

SYMPTOMS OF NON ISCHAEMIC

- A sudden painless monocular fall in vision.
- RAPD absent or mild
- FUNDUS- Tortuosity and dilatation of all branches of central retinal vein Dot and blot and flame haemorrhage to a mild moderate extent. Cotton wool spot

Macular oedema

Patchy ischaemic retinal whitening in a perivenular pattern at posterior pole.

TREATMENT

1. Panretinal photocoagulation
2. Steroid implant-ozurdex(dexamethasone)
3. Anti VEGF agents-lucentis Avastin
4. Symptomatic treatment
5. Treatment of complication
6. Control of systemic risk factors
7. Antiplatelet therapy

Ocular examination

Head Posture	Normal	Posture			
Visual acuity	Distant	vision	PH	Near	vision
	RE	6/12	6/6		N8
	LE	CF 6 ft	6/24		N36

Slit lamp examination

- Eye brow- Normal
- Eyelash- Normal
- Eyelid- Normal
- Conjunctiva- Normal
- Sclera- Normal
- Cornea and Iris- Normal
- Pupil-Round, regular, mild RAPDLE
- Lens: IMSC

CRVO A CASE STUDY

Basic information of the patient

Age: 59years Sex: Male Religion: Muslim

Occupation: Driver

Chief complaints: Loss of vision of left eye and blurriness in the center of vision since 1 week associated with pain in the left lower lid in the lateral aspect.

History of present illness: The patient was apparently normal before 1 week and he suddenly developed loss of vision in left eye. He observed this while moving his eyeball into left lateral side. He also complained blurriness in the center of vision and slight pain in the lower lid in the temporal aspect. Thus, he approached Shalakra OPD. During the examination by direct ophthalmoscope, he was diagnosed with central retinal veinocclusion associated with macular edema.

History of past illness: H/o Diabetes mellitus since 12 years.No history of hypertension.

EXAMINATION

Ashtavidh Pareeksha

- *Nadi*: 74/min
- *Mutra*: 4-6 times/day
- *Mala*: regular
- *Jihwa*: *Aliptha*
- *Shabda*: *Parkrutha*
- *Sparsha*: *Anushna Seetha*
- *Druk*: *Vikrutha*
- *Akruthi*: *Madhyama*

Vitals

- Respiratory rate: 22/min
- BP: 130/80mmof Hg

Systemic examination

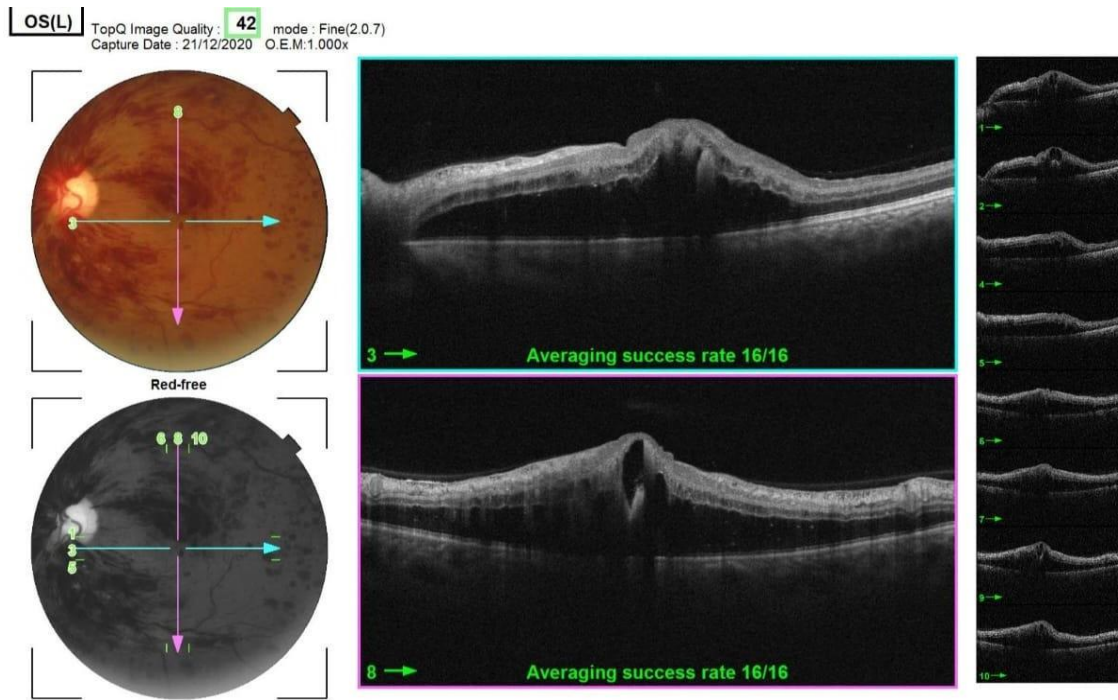
All the systemic examinations revealed no abnormalities.

Lab findings

BSL- fasting 90mg/dl Post prandial 168 mg/dl

Ophthalmoscopic examination

- RE- WNL
 - LE- CRVO with macular oedema
- FUNDUS- pale, haemorrhages in superior temporal region near OD OPTIC DISC- No demarcation of border in superior-temporal region OPTIC CUP- Obliteration
MACULA-Oedema
FOVEA- Foveal reflex absent



Treatment

Advice

1. *Jalaukavacharan-*
2. *Jalaukas* were applied at apanga region.
3. *Punarnavadi guggul* 2 BD
4. *Saptamrut loha* 2 BD with *ghrita*.
5. *Haritaki choorna* 2 gm HS
6. *Goghrita Pratimarsha nasya*

On first follow up

C/O- Vision improved by 6/60 Pain reduced
 Sleep improved
 O/E- Haemorrhagic spot reduced
 Dot and blot haemorrhage become pale.

Advice- *Jalaukavacharana*

Continue of treatment

10 ml *ghrita* with 200ml *dugdha* at night

On 2nd follow up

C/O- Vision improved by 6/36 Blurring reduced

O/E- haemorrhagic spot reduced. Advice-

Jalaukavacharana Continue of treatment

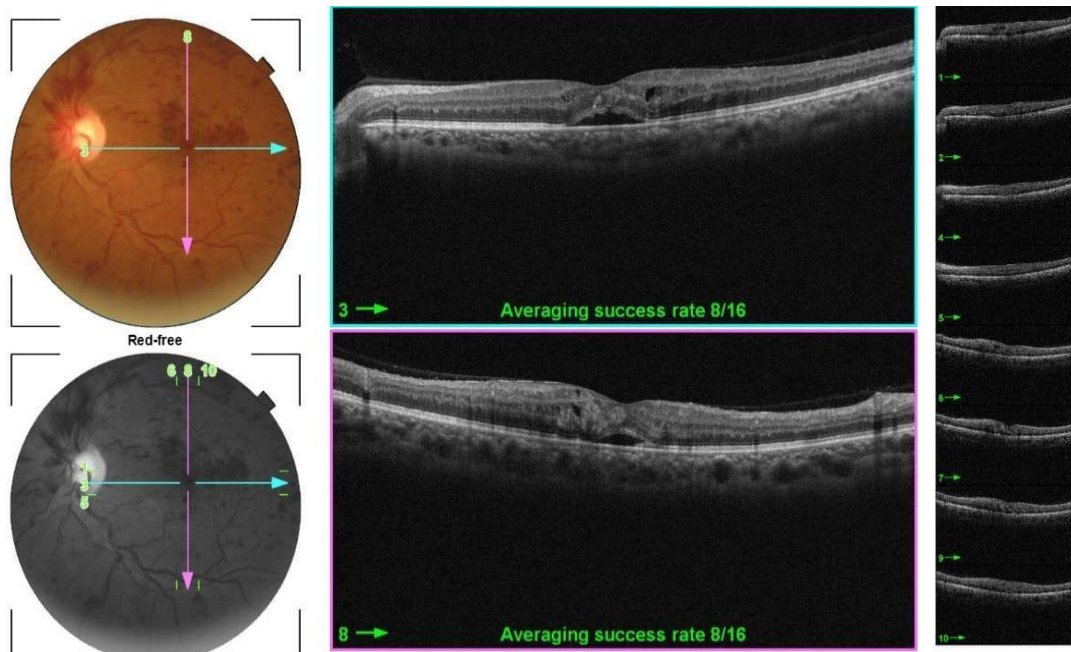
Haritaki choorna is replaced by *Triphala choorna*.

On 3rd follow up

C/O- no complaints Vision 6/24

Advice - *Saptamruta loha* 1 TDS with *ghrita*.

Ghritapan with *dugdha*. *Goghrita pratimarsha nasya*.



DISCUSSION

According to the contemporary science, no known effective medical treatment is available for the treatment of CRVO. As the main cause of CRVO is unknown various treatment modalities like corticosteroid therapy, Anti VEGF injections, Fibrinolytic agents, lasers are advocated, but these treatment are not having satisfactory result. *Ayurvedic* approach towards CRVO with *Pittarakta Shamana* drugs was quite promising and helpful in restoring the vision of patient.

Raktamokshan is advocated for *rakta pitta* disorders hence to treat CRVO *raktamokshan* is considered as first line of treatment. *Jalauka* have property of anticoagulant and anti-inflammatory and *Pittarakta Shamana* properties which correct the pathology of *Raktavaha Sroto Dushti* which reduced the retinal haemorrhage and macular oedema.

The *Saptamruta loha* has medicines of *Tikta* and *Kashaya Rasa* hence has *Pittaprashaman* properties. It is indicated for treating *Pittaj timira* so it can be used in haemorrhage. *Punarnawa* has *Madhura Vipaka* and *Shothaghna, kledahara* properties which are helpful in resolving retinal and macular oedema. Also the features of CRVO are similar to *Urdhwaga Raktapitta* condition and *Koshtha Sodhana* was used for *Pitta shodhan Chikitsa*.

Nasya Karma provides strength to the *Indriya*. *Nasya* was done with *Goghrita* due to its *Vata pitta Shamaka* property and help to correct the *Vayana Vayu Vaishamya*.

The improvement in the near vision may be due to reduction in macular oedema. No adverse events were noticed during the course of treatment and follow-up period too. The patient had stopped the allopathic medicines before the treatment. He was entirely on *Ayurvedic* treatment.

CONCLUSION

To restore back the vision is the most challenging task in Central Retinal Vein Occlusion. The present case study showed marked improvement in visual acuity with reduction in retinal haemorrhage and macular oedema. It proves that *Ayurvedic* management in retinal disorders is quite encouraging and it is an area of research in future.

REFERENCE

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