



Role of *Ayurvedic* Therapies Including *Chakshyushya Basti* in the Management of Central Retinal Vein Occlusion: A Case Report

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ABSTRACT

Introduction: Central Retinal venous occlusion has two main types including ischemic and nonischemic. Ischemic CRVO has symptoms such as massive engorgement, tortuosity of retinal veins, massive retinal haemorrhages ('splashed-tomato' appearance), disc oedema and hyperaemia, macular area is full of haemorrhages may be seen in some cases. In the management of CRVO, various modulators of hemorrheological factors—including anticoagulants, thrombolytics, and hemodilution—have been explored; however, none have demonstrated proven clinical benefit to date. Here, we present a case of 52 years old male patient, diagnosed with CRVO who underwent *Ayurvedic* treatment and showed remarkable improvement.

Case Report: A 52-year-old male patient, presented to our institution's *Shalakya* OPD with complaint of right eye sudden painless loss of vision. Patient was diagnosed with hypertension and CRVO. He had received treatment including topical eye drops and suggested for anti VEGF injection elsewhere, but there has been no improvement in vision. Hence, he opted for *Ayurvedic* management with the hope of vision improvement. Before treatment, baseline investigation OCT macula as shown in figure no 5 should be done. He underwent *Chakshyushya Basti* followed by *Mahatiktata Ghrita Nasya*, *Netra Tarpana*, *Jalaukavacharan*, *Vidhahakarma*. Oral medications such as *Vasaguduchyadi Kashay*, *Ushirasav*, *Mahatiktata Ghrita Abhyantar Pana* for one month along with antihypertensive medicine were given throughout treatment.

Result: His visual acuity improved significantly from counting fingers 2 Feet to 6/36 in the right eye and 6/12 to 6/9 in the Left Eye. In fundoscopic findings with direct ophthalmoscope, Massive Retinal Haemorrhages were decreased, and active haemorrhages were arrested after one month of treatment.

Conclusion: Thus it can be concluded that *Chakshushya Basti* with other therapies were found to be effective along with internal medicines in treating signs and symptoms of Central Retinal Venous Occlusion. This case serves as preliminary evidence for the successful management of CRVO through *Ayurvedic* therapies, emphasizing the need for further research and clinical studies involving larger patient groups to validate and establish these treatments in clinical practice.

Key Words: Central Retinal Venous Occlusion, *Chakshyushya Basti*, *Jalaukavacharan*, *Mahatiktata Ghrita*, *Nasya*, *Netra Tarpana*.

INTRODUCTION

Retinal vein occlusion has been classified into Central retinal vein occlusion (CRVO) and Branch retinal vein occlusion (BRVO). Central retinal vein occlusion may be non-ischemic CRVO (venous stasis retinopathy) or ischemic CRVO (hemorrhagic retinopathy). ¹ The prevalence of retinal vein occlusions in the developed world has been found to be 5.20 per 1000, and the prevalence of central retinal vein occlusion is 0.8 per 1000. Men were 1.7 times more frequently affected

by RVO than were women. ²

Non-ischemic CRVO is a comparatively benign disease, causes blurring of vision with permanent central scotoma as the major complication from cystoid macular edema. Ischemic CRVO is a seriously blinding disease, and neovascular glaucoma is its major complication. association between Retinal Venous Occlusion (CRVO in particular) and glaucoma/ocular hypertension has been widely reported in various studies. ³ Thus, a central retinal vein occlusion can induce an

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ischemic and hypoxic state with resulting sequelae of macular edema and neovascularisation. ⁴

In *Ayurveda*, symptoms of CRVO can be correlated to *Urdhwaga Raktapitta* and *Pittaj Timira*. *Urdhwaga Raktapitta* has 7 *Gatis* (ways) of *Urdhwaga Raktapitta* two of them are eyes. Subdivided into 5 types *Vataja*, *Pittaja*, *Kaphaja*, *Dwandwaj*, *Sannipataja*. *Akadoshaja* is *Sadhya Dwidoshaja* is *Yapya* and *Sannipataja* is *Asadhya* but *Urdhwaga Raktapitta* is also considered as a *Sadhya Vyadhi*. *Urdhwa Raktapitta* is related with *Kapha Dosha*, and accordingly treatment modalities are mentioned in different *Ayurveda* texts. ⁵ *Pittaj Timira* described by *Acharya Sushruta* where he mentioned the *Lakshanas* like “*Shikhibaharvichitrani Nilkrushnani pashyati*” which means when the vitiated *Doshas* and *Rakta Dhatu* localize in the *Patala*, the patient experiences visual hallucinations of celestial and radiant objects such as the sun, lightning, rainbows, and fireflies. All visible objects appear to have a peacock-like coloration. According to *Acharya Vagbhata*, *Nasya* and *Netra Tarpana* are indicated in *Timira's Samanya chikitsa*. ⁶

CASE REPORT:

A 52-year-old male patient presented on 13th November 2024 to the Shalakyatantra OPD of the institution with complaints of sudden painless blurry vision in right eye for the last 15 days. There was no history of recent travel or trauma, any known allergies, or addiction. He denies any history of significant illnesses, and his immediate family members do not present with similar complaints. The patient gave voluntary written informed consent for ayurvedic management, understanding the treatment plan and its implication. His pulse, heart rate, and respiratory rate were also normal. However, he has undiagnosed raised blood pressure with no history of antihypertensive medicine.

Table 1: Ophthalmic examination

Vision	Right eye	Left eye
Distance Vision	Counting finger 2 feet	6/12
Near Vision	NI	N6
Slit lamp examination		
Lid	Normal	Normal
Conjunctiva	Normal	Normal
Sclera	Normal	Normal
Cornea	Clear	Clear

Anterior chamber	Maintained	Maintained
Iris	Normal	Normal
Pupil	Round, Regular, Reacting	Round, Regular, Reacting
Intraocular pressure	14.6mm of Hg with Schiotz tonometer	17.3mm of Hg with Schiotz tonometer
Fundus examination		
Disc	Margins blurred, Massive retinal hemorrhage	NAD, CD ratio- Normal
Macula	Edematous, marked hemorrhage	FR- present
Vessels	Tortious	Tortious
Background	Splashed tomato Appearance	NAD
Lens	Transparent	Transparent

Diagnostic assessment: OCT Scan (Macula) has mention in figure 5

Laboratory investigation: CBC, ESR, Blood glucose level was within normal limit

Table 2: Timeline of events

Date	Event
12 November 2024	The patient presented in OPD with Blurry vision in Right eye. Patient was diagnosed with Central Retinal Venous Occlusion elsewhere
13 November 2024	<i>Chakshushya Yogbasti</i> started for 8 days Oral medicines: <i>Vasaguduchyadi Kashay+ Ushirasav</i> Along with antihypertensive medicine
22 November 2024	<i>Nasya</i> and <i>Netra Tarpana</i> started with <i>Mahatiktata Ghruta</i> with <i>Viddhakarma</i>
29 November 2024	1 st sitting of <i>Jalaukavacharan</i> done.
29 December 2024	2 nd sitting of <i>Jalaukavacharan</i> done.
15 January 2025	Visual acuity improved, and signs and symptoms decreased
12 May 2025	Visual acuity maintained at 6/36 in right eye, improvement in signs and symptoms

Table 3: Ayurvedic management

Sr. No.	Drug	Ingredients	Dose	Duration
1	Chakshushya Basti	Anuvasan Basti- Dhanvantar Tail (40 ml) + Mahatiktaka Ghrita (40 ml) Niruh Basti- Erandamool kwath- 4 prasrut (380 ml) + Yashtimadhu, Shatapushpa Kalka (2 prasrut- 96 gm) + Mahatiktaka Ghrita (2 Prasrut- 90ml) + (Madhu+ Saindhav)- 1 karsha- 10gm	1-0-0	8 days
1	Nasya- Mahatiktaka ghrita	Patha, Musta, Ativisha, Katuka, Ushira, Haritaki, Ghrita	1-0-0	7 days
2	Netra Tarpana- Mahatiktaka Ghrita	Patha, Musta, Ativisha, Katuka, Ushira, Haritaki, Ghrita	1-0-0 (1000 Matrakal)	7 days
4	Vidhakarman	Vedhana with 26 no ½ inch needle at Apanga, Lalata, Upanasika	1-0-0	7 days
5	Jalaukavacharan	2 sitting at Aavart, Apanga, Urdhwavartma, Upanasika		2 sittings
6	Vasaguduchyadi Kashay	Vasa, Guduchi, Amalaki, Haritaki, Bibhitaki, Chirayita	3 teaspoons with warm water	1 month
7	Ushirasav	Ushira, Gambhari, Neelotpala, Priyangu, Dhanvayasa, Patha	3 teaspoons with warm water	1 month

The interventions provided are illustrated in Figures 1 to 4.

RESULT

Table 4: Follow up findings

Criteria	Right eye	Left eye
Visual acuity (Unaided)	6/36	6/9
Fundus examination findings	Reduction in superficial flame shaped haemorrhages with reduced macular edema	CD ratio- Normal FR- present Vessels- Tortious

Fundus examination revealed reduction in superficial flame shaped haemorrhages with reduced macular edema in right eye. Also, visual acuity improves from counting finger 2 feet to 6/36 in right eye. By this time, Visual acuity restored and maintained during the follow-up period, which has shown in figure 6.

DISCUSSION

Central Retinal Venous occlusion is a *Drishti-Patalagata Roga*. One of the causes of Central Retinal Venous occlusion is the vitiation of the *Pitta* and *Rakta*. The vitiated *Doshas* gets confined to the eyes. It manifests as microangiopathy, haemorrhage and venous bleeding.

In the management of *Pittaja Timira*, the *Acharya Yogaratanakara* recommended therapies such as the application of *Anjana* (cooling collyrium), *Aschotana* (eye irrigation), *Tarpana* (eye nourishment with medicated ghee), *Nasya*

(nasal administration of medicines), *Mṛudu Virechana* (mild purgation), *Tikta-Pradhana Aushadhi* (use of bitter-tasting formulations), and *Raktamokshan* (bloodletting) as effective treatment.⁷

Pittaj Timira has *Raktavahasroto dushti lakshanas* (vitiation for channels carrying blood) along with involvement of *Kapha dosa* and *Rasadhatu* dushti. Involvements of these factors can be confirmed by signs like haemorrhages, abnormal structure and loss of integrity of blood vessels such as tortuosity, dilation and endothelial damage. While treating all the morbidities of *Srotas* (channels) and *Dhatus* (vital elements) almost care should be given to *Vata dosa* as it is the prime *Dosha* responsible for the functioning and regulation of all sense organs.⁸

Fate of Central Retinal Venous occlusion

A. **Chakshushya Basti-** Madhu having *Yogvahi Raktapit-tahara* and *Sandhan* properties⁹, is absorbed and assimilated by the body very quickly. Saindhava due to its *Sukshma Guna* reaches up to micro channels, due to its *Tikshna Guna* breaks down morbid *Mala* and *Dosha Sanghat* and its *Snigdha Guna* liquefies the *Doshas*.¹⁰ There is no drug better than *Taila* for the alleviation of *Vata*. Due to its *Iyavayi*, *Ushna*, *Guru* and *Snigdha* properties, *Taila* pacifies of *Vata*, increases permeability of cell membrane, and helps in easy elimination of *Dosha* and *Mala*.¹¹ *Kalka* and *Kwath Dravya* serve the function of *Utkleshan* or *Dosha Shaman*.¹² According to *Acharya Charak Yashtimadhu* have *Rasayan*,¹³ best for *Chakshushya* and *Ropan* properties and has mentioned it in *Shonitstaphan Mahakashya*. Due to these

properties *Yashtimadhu* helps to reduce the oxidative stress and damages of thinned out cornea *Shatpushpa* is having *Netrarogahar* properties and increases the retention time of *Basti*.¹⁴ *Erandmool Kashaya* having *Irishya* and *Vatahar* properties help in pacifying *Vata*. So when *Chakshushya Basti* was given to patient of CRVO, it alleviated the *Tridosha* and *Rakta* which leads to the normal function of all the *Dhatus* and helps to reduce the oxidative stress and neovascularization.

- B. *Nasya*:** *Nasya karma* is described for *Timira* because nose is a gateway of drug administration in case of *Urdhwajatrugata Roga*. *Acharyas* have recommended *Nasya* in *Timira Chikitsa* to strengthen the eyes. *Nasya* with *Mahatiktaka Ghrita* is useful due to its *Rakta Shodhaka* and *Raktaprasadak* properties. It also possesses *Balya*, *Indriyaprasadan*, *Jeevan*, *Brihan* properties. It enhances the functioning of the sense organs.¹⁵
- C. *Netra Tarpana*:** It is the most revered *Kriyakalpa* extensively used in *Netra Rogas*. Due to *Raktapittashamak*, *Ropaka* and *Rasayan* properties, *Mahatiktaka Ghrita* it is used to alleviate haemorrhagic signs. *Jivanti* is one amongst the best *Chakshushya* drug and most of the contents of *Mahatiktaka Ghrita* has *Tridosha* pacifying actions.¹⁶
- D. *Vidhakarma*:** *Vidhakarma* works over *Tridosha* and *Rakta*. It opens the route of entrapped *Vayu* by clearing *Stotas* and helps to remove freely in the body. On removing the obstruction of the blood vessels, establishing the circulation and stimulation to sensory fibres from peripheral receptors, to reduce the transmission of irritating signals from the affected area is the main mechanism of action of *Vidhakarma*. Thus, *Vidhakarma* therapy helps to maintain balance between *Vata*, *Pitta* and *Kapha* in the body.¹⁷
- E. *Jalaukavacharan*:** Leeches may secrete a vasodilative, histamine-like substance, which increases the inflow of blood after a leech bite and reduces local swelling. The saliva of *Jalauka* contains the anti-inflammatory components which get invaded into the tissues and reduces the inflammation.¹⁸

Systemic Medications

- A. *Vasaguduchyadi Kashay*:** It is helpful in the treatment of *Pitta* imbalance and bleeding disorders. *Vasa* is indicated in *Urdhwagata Raktapitta*. Due to *Tikta*, *Kashay Rasa* and *Sheeta Virya*, *Vasa* is *Pittahara*. It is also *Kaphahara* due to its *Laghu*, *Guna* and *Katu Vipaka*.
- B. *Ushirasav*:** *Ushirasav* is cooling, haemostatic and *Pitta* pacifying medicine. It is diuretic, cooling, tranquilizer and blood purifier.¹⁸ It has *Raktapittavinashan* and *Shothhar* properties.¹⁹

CONCLUSION

This case report underscores the potential of Ayurvedic management in Central Retinal Vein Occlusion (CRVO),

guided by the principles of *Urdhwaga Raktapitta* and *Pittaja Timira*. The integrated use of therapies such as *Chakshushya Basti*, *Nasya*, *Tarpana*, *Vidhakarma*, *Jalaukavacharan*, and systemic formulations like *Mahatiktaka Ghrita*, *Vasaguduchyadi Kashay*, and *Ushirasav* contributed to vascular recovery, haemorrhage resolution, and visual improvement. These findings suggest that Ayurveda can offer an effective first-line approach in managing acute ocular conditions like CRVO.

REFERENCES

- Khurana AK. Comprehensive Ophthalmology. 6th ed. New Delhi: The Health Science Publisher; 2015:271.
- Blair K, Czyz CN. Central Retinal Vein Occlusion [Internet]. In: StatPearls. Treasure Island (FL): StatPearls Publishing; 2025 Jan– [updated 2023 May 1; cited 2025 Jun 6].
- Amy P, Christine N and Stephanie L. Central Retinal Vein Occlusion: A Review of Current Evidence-based Treatment Options, Jan-Mar 2016: 46.
- Sihota R, Tandon R. Parson's Diseases of the Eye. 22nd ed. Reprint. New Delhi: Elsevier; 2016:322.
- Vaishnavi J, Nutan R. A role of Ayurveda treatment in vitreous haemorrhage management (*Urdhwaga Raktapitta*). IRJHIS [Internet]. [cited 2025 Jun 6].
- Dingari C. The Shalakyatantra. Delhi: Chaukhamba Sanskrit Prakashan; Reprint 2007. p. 47.
- Narayan V. Netraroga Vidnyan. 11th ed. Varanasi: Vimal Vision Publication; p. 169.
- Sreekumar K, Amrutha S. Role of Ayurveda in the Management of Central Retinal Vein Occlusion- A Case Report. Ayushdhara [Internet]. 2022Jan.15 [cited 2025Jun.6];8(6):3634-8.
- Agnivesh, Charak Samhita, Vidyotini Hindi Commentary by P. Kashinath Pandey and Dr. Gorakhnath Chaturvedi Varansi:Chaukhambha Sanskrit Bhavan; Reprint 2008, volume -1, Sutrasthana 27/249 p.555.
- Agnivesh, Charak Samhita, Vidyotini Hindi Commentary by P. Kashinath Pandey and Dr. Gorakhnath Chaturvedi Varansi: Chaukhambha Sanskrit Bhavan; Reprint 2008, volume -1, Sutrasthana 27/245 p.554.
- Agnivesh, Charak Samhita, Vidyotini Hindi Commentary by P. Kashinath Pandey and Dr. Gorakhnath Chaturvedi Varansi: Chaukhambha Sanskrit Bhavan; Reprint 2008, volume -1, Sutrasthana. 27/300 p. 561.
- Vasant P. Principles and Practice of Panchakarma. New Delhi: Chaukhambha Publication; Reprint 2014. p. 498.
- Agnivesh, Charak Samhita, Vidyotini Hindi Commentary by P. Kashinath Pandey and Dr. Gorakhnath Chaturvedi Varansi:Chaukhambha Sanskrit Bhavan; Reprint 2008, volume -1, Chikitsasthana 1-3/30 p. 39.
- Agnivesh, Charak Samhita, Vidyotini Hindi Commentary by P. Kashinath Pandey and Dr. Gorakhnath Chaturvedi Varansi:Chaukhambha Sanskrit Bhavan; Reprint 2008, volume -1, Sutrasthana 25/40 p.468.
- Tripathi B. Ashtanga Hridayam, Nirmal Hindi Commentary. Uttartantra. Chapter 13, Verses 2–3. Delhi: Chaukhamba Sanskrit Pratishthan; Reprint 2007.p. 210
- Tripathi B. Ashtanga Hridayam, Nirmal Hindi Commentary. Uttartantra. Chapter 13, Verses 2–3. Delhi: Chaukhamba Sanskrit Pratishthan; Reprint 2007.p. 215.
- Thakral KK, Samhita S. Hindi Vyakhya. Part-1. Nidansthan. 1st ed. Varanasi: Chaukhamba Oriental; 2020. No. 74. p. 702.

18. Chougule P, Patil R. A comprehensive study of Jalaukaavcharan (leech therapy) in perspective of Ayurveda. AYUSH: International Research Journal of Ayurveda Teachers Association. 2021;1(1):55–9.
19. Neve J, Dharkar N. Review on Ushirasava (fermented traditional medicine of *Ayurveda*). J Ayurveda Integr Med Sci. 2019;5:218–25.
20. Shastri A. Bhaishajya Ratnavali, Raktapitta Chikitsa Prakaran. Varanasi: Chaukhamba Prakashan; 2016. p. 407



Figure 1: Nasya.



Figure 2: Netra Tarpana.



Figure 3: Jalaukavacharan.



Figure 4: Viddhakarma at Bhrumadhya, Aavarta, Apanga, Upanasika, Nasagra pradesh.

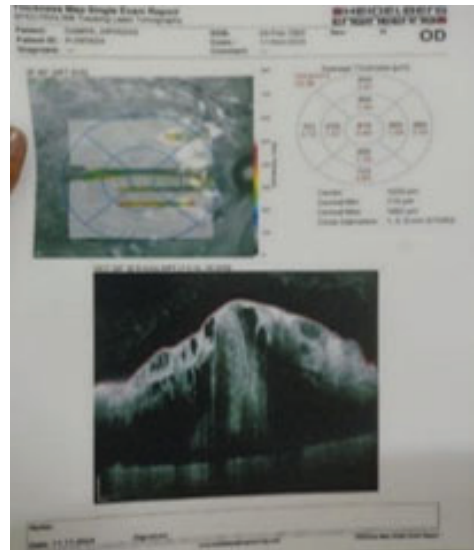
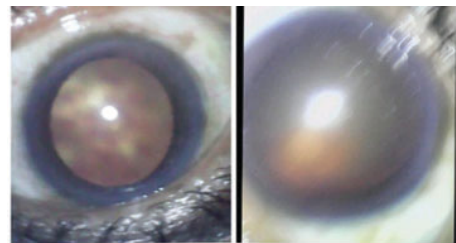


Figure 5: OCT Scan (Macula) right eye.



Before treatment After treatment

Figure 6: Fundus photograph.