



AYURVEDIC APPROACH TO VISION STABILIZATION IN MIXED RETINOPATHY WITH SUPEROTEMPORAL BRANCH RETINAL VEIN OCCLUSION: A CASE REPORT

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ABSTRACT

Mixed retinopathy with superotemporal branch retinal vein occlusion (STBRVO) is a vision-threatening retinal vascular disorder characterized by venous congestion, hemorrhages, edema, and ischemic changes in elderly patients, especially those with long-standing systemic comorbidities such as diabetes mellitus and hypertension. Conventional management focuses on intravitreal pharmacotherapy and laser interventions, which may have limitations in long-term outcomes. From an Ayurvedic perspective, such conditions can be correlated with *Sannipataja Timira* involving *Pitta* and *Rakta Dushti*. This case report presents a 75-year-old female patient with progressive painless diminution of vision in the right eye, associated with photopsia and central vision loss, diagnosed as mixed retinopathy with STBRVO. The patient had previously undergone laser photocoagulation and intravitreal triamcinolone injections with no visual improvement. She was subsequently managed with Ayurvedic interventions including *Virechana*, *Pratimarsha Nasya*, *Padabhyanga*, and internal medications. Post-treatment assessment showed improvement in ocular comfort, and stabilization of visual function without further deterioration during follow-up. This case highlights the role of Ayurvedic systemic purification and *Netra roga chikitsa* in stabilizing vision and improving quality of life in chronic retinal disorders.

KEYWORDS: Mixed Retinopathy, STBRVO, *Virechana*, *Sannipataja Timira*, laser photocoagulation.

INTRODUCTION

Mixed retinopathy refers to the co-existence of two or more retinal pathologies in the same eye, producing overlapping clinical and fundoscopic features. It is commonly encountered in patients with multiple systemic or vascular risk factors.^[1,4] Most common and frequent combination include Diabetic retinopathy and Hypertensive retinopathy.^[2,3] Retinal vascular disorders such as branch retinal vein occlusion (BRVO) are common causes of visual impairment in elderly individuals, particularly those with long-standing systemic illnesses like diabetes mellitus and hypertension. Mixed retinopathy associated with BRVO

often presents with progressive painless diminution of vision, photopsia, and central vision defects.

Despite advances in modern ophthalmology, including laser photocoagulation and intravitreal injections, visual outcomes are frequently limited. Ayurveda emphasizes a systemic approach through *Dosha*, *Dushya*, and *Srotas* evaluation, offering a multidimensional management strategy for retinal vascular diseases.

From an Ayurvedic perspective, retinal vascular occlusive disorders can be correlated with *Sannipataja timira*, involving *Pitta* and *Rakta Dushti*, and *Srotorodha*

of *Rasavaha* and *Raktavaha Srotas* leading to the impaired nourishment of ocular structures. This case report highlights the Ayurvedic approach in the management of mixed retinopathy with STBRVO in an elderly patient unresponsive to conventional therapy.

CASE REPORT

A 75-year-old female patient was a known case of diabetes mellitus and hypertension for the past 15 years and had been on regular medication for the same since 2 years. There was no history of ocular trauma, surgery, or similar complaints in the left eye, presented with the complaints of painless, gradually progressive diminution of vision in the right eye for the past one year, affecting both distant and near vision. The visual impairment was insidious in onset and progressively worsened over time, significantly interfering with her routine activities, particularly fine near work such as threading a needle, which she previously performed with ease.

In addition to diminished vision, the patient complained of persistent blurring of vision and reduced central visual clarity in the right eye. She also reported intermittent watering of the affected eye during the course of the illness. Approximately two months prior to presentation, she experienced sudden onset of flashes of light (photopsia) in front of the right eye, accompanied by further deterioration of vision.

Following the onset of photopsia, she consulted an ophthalmology center where fundus evaluation revealed retinal pathology, and she subsequently underwent retinal laser photocoagulation. Although photopsia subsided following the procedure, there was no improvement in visual acuity.

As visual impairment persisted, she later sought treatment at a tertiary care hospital, where two intravitreal triamcinolone acetonide (IVTA) injections were administered in the right eye. Following these interventions, the patient experienced further

deterioration of vision, with an estimated visual loss of nearly 50% in the affected eye. As no significant visual recovery was observed despite these treatments, she approached to the Shalakya Tantra outpatient department of SKAMCH & RC for further management.

Ophthalmic examination prior to initiation of Ayurvedic treatment, visual acuity of distant vision without aid in the right eye was markedly reduced that is light perception, while the left eye had comparatively better visual function of 6/9, near vision in both eyes without aid is N-10. Intraocular pressure measured by applanation tonometry was 19 mmHg in the right eye and 25 mmHg in the left eye. Slit-lamp examination of the anterior segment did not reveal any active inflammatory signs. Gonioscopic evaluation did not demonstrate any abnormal angle findings. Fundoscopic examination of the right eye demonstrated features suggestive of branch retinal vein occlusion with associated mixed retinopathy, including flame-shaped hemorrhages, venous dilatation, and retinal changes predominantly in the superotemporal quadrant, while the left eye showed signs of mixed retinopathy without vascular occlusion. Optical coherence tomography of the right eye revealed significant macular edema with increased central macular thickness, supporting the diagnosis of mixed retinopathy with STBRVO. These findings, in conjunction with the patient’s systemic comorbidities, guided the final clinical diagnosis prior to treatment.

Systemic examination showed normal findings in the cardiovascular, respiratory, central nervous and gastrointestinal systems.

Based on these clinical presentations, diagnosis of *Sannipataja Timira* involving *Pitta* and *Rakta Dushti* i.e., Mixed Retinopathy with STBRVO was confirmed. The treatment aimed at stabilizing visual function, arresting the progression of retinal pathology, and improving quality of life through Ayurvedic interventions.

SEX: M/F LP/D.P. No:

HISTORY: Detailed history present for 1 year of vision loss in right eye. Gradually progressive diminution of vision in the right eye for the past one year, affecting both distant and near vision. The visual impairment was insidious in onset and progressively worsened over time, significantly interfering with her routine activities, particularly fine near work such as threading a needle, which she previously performed with ease.

H/O: DM/HTN/ASTHMA/CARDIAC/PAM HISTORY: HTN, DM, EMD, medical

PULSE:

	RIGHT EYE	LEFT EYE
VISION	6/60	6/9 (P)
ANTERIOR SEGMENT	Normal	Normal
I.O.P. @ 9.50 AM	19 mmHg	25 mmHg
GONIOSCOPY	Normal	Normal
FUNDUS	Flame-shaped hemorrhages, venous dilatation, retinal changes in superotemporal quadrant.	Mixed retinopathy without vascular occlusion.
VISUAL FIELDS	↓ PR III	Normal
DIAGNOSIS	STBRVO Sp. subconj. hpt	
PLAN OF ACTION	Mixed retinopathy with STBRVO. NIT. ghris. bhaksh. to. Pratiksha.	



THERAPEUTIC INTERVENTION

DATE	TREATMENT GIVEN	DRUG & DOSE
8/10/25-14/10/25	Udwarthana	Triphala churna+ Kolakulathadi churna
15/10/25-17/10/25	Deepana-Pachana	Chitrakadi vati (1-0-1) ; Before food
18/10/25-20/10/25	Snehapana	Mahatriphaladya ghrita(30 ml, 75 ml & 105 ml)
21/10/25-23/10/25	Sarvanga abhyanga+ Sarvanga bashpa sweda	Murchitha tila taila
24/10/25	Virechana -8 vegas	Trivrit lehya – 60gm
25/10/25-26/10/25	Samsarjana Krama	

Assessment after virechana

	DISTANT VISION(WITHOUT AID)	NEAR VISION(WITHOUT AID)
BE	6/9	N10
RE	1/60	N10
LE	6/9	N10

Treatment given after virechana

DATE	TREATMENT GIVEN	DRUG & DOSE
27/10/25-19/11/25	Internal medications	Mahavasakadhi kwatha (30ml-0-0) ; Before food Pathyapunarnavadhi kashaya (0-0-30ml) ; Before food
27/10/25-19/11/25	Pratimarsha nasya	Ksheerabala taila 101 avarti (2/2 drops)
27/10/25-19/11/25	Pada abhyanga	Dhanvantaram taila (15mins)
20/11/25	Nithya virechana	Gandharva hasthadi taila

Assessment after follow up

	DISTANT VISION(WITHOUT AID)	NEAR VISION(WITHOUT AID)
BE	6/9(P)	N10
RE	2/60	N10
LE	6/9(P)	N10

OBSERVATION

Following the administration of Ayurvedic interventions including Udwarthana, virechana, Pratimarsha Nasya with Ksheerabala 101, Shamana Aushadhi such as Mahavasadi Kwatha, Pathya punarnavadi kwatha, Pada Abhyanga with Dhanwantaram Taila, and Nithya virechana the patient showed stabilization of visual acuity in the right eye. Although no marked numerical improvement in vision was documented, further deterioration was arrested during the treatment and follow-up period.

Subjectively, the patient reported improvement in visual comfort, reduced blurring of vision, and absence of

photopsia. Functional ability for near activities showed mild improvement, and the patient experienced better confidence in performing routine tasks.

The left eye visual acuity remained stable, with no new complaints or decline during follow-up. No adverse ocular events were observed during the course of treatment.

Overall, the result indicates that Ayurvedic management was clinically beneficial in preserving residual vision, improving visual quality, and preventing further progression of the condition.

RESULTS

VISUAL ACUITY (DISTANT VISION)	BEFORE TREATMENT	AFTER VIRECHANA	AFTER FOLLOW UP
BE	6/9	6/9	6/9(P)
RE	Light perception	1/60	2/60
LE	6/9	6/9	6/9(P)

DISCUSSION

Mixed retinopathy represents a complex retinal pathology where multiple vascular and degenerative mechanisms coexist, often leading to rapid and irreversible visual impairment if not addressed

systemically. In the present case, a 75-year-old female with long-standing diabetes mellitus and hypertension presented with progressive painless diminution of vision, photopsia, and central visual loss in the right eye, and diagnosed as mixed retinopathy with branch retinal vein

occlusion (BRVO). The chronicity of systemic illnesses, age-related degeneration, and prior invasive ocular interventions contributed significantly to disease progression.

Diabetes and Hypertension are well-established risk factors for retinal microvascular damage. Long-standing hyperglycemia leads to endothelial dysfunction, capillary basement membrane thickening, and retinal ischemia, while hypertension accelerates vascular sclerosis and venous compression. The occurrence of photopsia followed by sudden visual deterioration suggests retinal ischemia and vascular compromise, which is consistent with BRVO. Although laser photocoagulation and intravitreal triamcinolone injections are standard interventions aimed at reducing macular edema, the patient experienced progressive visual decline, highlighting the limitations of localized treatment when systemic pathology remains uncontrolled.

The clinical presentation closely resembles *Sannipataja Timira*, wherein all three *Doshas* are involved with predominance of *Pitta* and *Rakta Dushti*. Symptoms such as *Avila Darshana* (blurred vision) and *Jyotipashya* (perception of flashes of light) described in classical texts correlate well with photopsia and visual blurring observed in retinal vascular disorders.^[5] The identified *Nidanans* such as *Sukshma Nirikshana*, *Durekshanata*, *Diwaswapna*, excessive intake of *Amla*, *Kulatha*, and *Masha*, along with psychological factors like *Chinta*, *Shoka*, and *Kopa*, contribute to *Pitta-Rakta* vitiation and obstruction of retinal microchannels (*Srotorodha*).

The *Samprapti* analysis reveals *Jataragnimandya* leading to *Dhatwagnimandya* and *Saama Avastha*, resulting in vitiation of *Rasa* and *Rakta Dhatu*s. Prolonged *Prameha* leads to excessive *kleda*, vitiation of *Kapha* and *Pitta*, and later involvement of *Vata*, resulting in obstruction of *rasavaha* and *raktavaha srotas*. This hampers proper nourishment of the ocular tissues, ultimately affecting the *Drishti mandala* and manifesting as *Timira*. Clinically, it presents with blurred vision, floaters, and gradual, painless diminution of vision.

From a contemporary perspective, *Prameha Janya Timira* can be correlated with diabetic retinal changes, particularly early diabetic retinopathy and macular involvement, where chronic metabolic imbalance causes microvascular damage and retinal ischemia.^[6] Thus, this concept highlights the Ayurvedic understanding of systemic metabolic disorders producing localized ocular pathology and underscores the importance of early diagnosis and comprehensive management of *Prameha* to prevent progressive visual loss.

The involvement of *Rasavaha* and *Raktavaha Srotas* with *Sanga* and *Vimargagamana* ultimately affects the *Patala* of *Netra*, producing functional and structural retinal impairment. This pathogenesis explains the

chronic, progressive, and *Yapya* nature of the disease in this elderly patient.

The Ayurvedic management adopted in this case emphasized systemic purification and ocular nourishment rather than symptomatic ocular intervention alone. *Virechana* was selected considering *Pitta-Rakta* predominance, aiming to eliminate morbid *Doshas*, and correction of *syandata* of *srotas*, reduce macular edema and improve microcirculation.

PROBABLE MODE OF ACTION OF INTERVENTION

Udvardana acts mainly at the systemic and metabolic level. Its *ruksha*, *usna*, and *lekhana* properties help alleviate *Kapha-Meda vridhhi*, reduce *srotorodha*, and improve peripheral circulation. By improving microvascular flow, *Udvardana* supports better venous return and reduces blood viscosity, indirectly relieving retinal venous congestion. Improved metabolic correction aids in controlling diabetes and dyslipidemia, which are major contributors to retinal vascular pathology.

Virechana is pivotal in addressing *Pitta-Rakta dushti*, the core pathology in retinal hemorrhagic and ischemic disorders. By expelling vitiated *Pitta*, it helps reduce inflammation, capillary damage, and abnormal vascular permeability. Systemic *shodhana* improves *srotas* patency, corrects *Rakta* quality, and supports retinal microcirculation. This leads to stabilization of retinal pathology, prevention of further hemorrhage and edema, and slowing of disease progression in chronic STBRVO.

Mahavasadi Kwatha in Diabetic Macular Edema does *Samprapti vigatana* of *Prameha*-associated *Timira*, where *Kapha* and *Kleda* predominate and lead to *Abhishyanda*, the fundamental cause of *Netra Rogas*. *Abhishyanda* results in leakage (*Abhishyanna*) of the *Drishti srotases*, causing accumulation of *Dushita Kapha* and *Kleda* within the retinal layers, manifesting as macular edema. The formulation contains drugs such as *Vasa*, *Guduchi*, *Katuki*, *Triphala*, and *Nimba*, which predominantly possess *Tikta-Kashaya rasa* and *Laghu-Ruksha guna*, enabling penetration into *sookshma srotases* and effective reduction of *Kapha* and pathological *Kleda*. *Vasa* and *Nimba*, with their *Pitta-Kapha shamaka* and *Raktashodhana* properties, help in reducing inflammatory mediators and vascular permeability, Reduces vascular leakage, retinal inflammation & improves microcirculation. *Guduchi*, known for its *Rasayana* and *Tridosha shamaka* effects, counteracts oxidative stress, improves endothelial function, and supports stabilization of the blood-retinal barrier. *Katuki*, by virtue of its *Deepana-Pachana* and *Kleda-shoshana* action, assists in correcting metabolic derangements and reducing fluid accumulation. *Triphala*, with its *Chakshushya*, antioxidant, and *Raktavaha srotoshodhana* properties, enhances retinal microcirculation and prevents further tissue damage.

Collectively, the *Raktavaha srotodustihara* action of *Mahavasadi Kwatha* improves retinal perfusion, reduces hypoxia, and stabilizes the blood–retinal barrier, thereby facilitating absorption of excess fluid, reducing macular thickening, and achieving *Samprapti Vighatana* in Diabetic Macular Edema.

Pathya Punarnavadi Kaşaya, composed of *Haritaki*, *Punarnava*, *Haridra*, *Pippalamoola*, *Chitraka*, *Eraᅇᅇa*, *Mustha*, *Jeeraka*, *Devadaru*, and *Pippali*, exerts a multi-dimensional action in mixed retinopathy with STBRVO by addressing *Rakta duşti*, *Srotorodha*, *shotha*, and *Vata–Kapha avaraᅇa*. *Haritaki* and *Mustha* act as *amapacaka* and *Srotoshodhaka*, facilitating clearance of microvascular obstruction, while *Punarnava* and *Eraᅇᅇa*, through their potent *shothahara* properties, aid in the resolution of retinal edema and venous congestion. *Haridra* contributes *Rakta-prasadana* and anti-inflammatory effects, limiting endothelial damage and hemorrhagic tendency. *Pippalimoola*, *Pippali*, *Chitraka*, and *Jeeraka* enhance *Agni deepana* and circulation, counteracting sluggish blood flow and improving retinal perfusion, whereas *Devadaru* supports *Kapha-vilayana* and *Lekhana*, reducing vascular stasis and wall thickening. Accelerates absorption of retinal hemorrhages, reduces edema, and protects retinal tissues, contributing to visual stabilization and prevention of further ischemic damage in STBRVO-associated mixed retinopathy.

Padabhyanga with Dhanvantara Taila, which possesses *Vata-hara*, *balya*, *sukşma*, and *srotoshodhaka* properties, may help in pacifying aggravated *Vata* and supporting circulatory balance. In STBRVO-associated mixed retinopathy, where *rakta srotodushti* along with *vata-kapha* imbalance contributes to venous congestion and retinal ischemia, *Padabhyanga* may serve as a supportive measure by enhancing *srotoshodhana* and stabilizing microcirculation. Additionally, descriptions in *Naᅇi Vijnana* and statements by *Acharya Vagbhata* regarding *sira* connections between the foot and eye further support this distal therapeutic concept. Thus, *Padabhyanga*, though a simple external therapy, may contribute to systemic regulation and supportive management of retinal vascular pathology.

Pratimarsha Nasya with Ksheerabala Taila 101 was used as an adjuvant therapy in this case, considering its Ayurvedic correlation as a *tridoşhaja netra-vyadhi* with predominant *Vata–Pitta* involvement, *raktaduşti*, and *srotorodha*. Retinal venous occlusion and ischemic changes may be attributed to *vata-prakopa* leading to impaired *raktavaha srotas*. *Pratimarsha Nasya* is indicated for daily use in *urdhvajatrugata* and *netra* disorders, as *nasya* is described as the gateway to the *shiras*, facilitating drug action on ocular and neurovascular pathways. *Ksheerabala Taila 101*, with its repeated *avartana*, possesses potent *Vata-shamaka*, *Pittahara*, *balya*, and *rasayana* properties, helps to pacify *rakta-pitta* involvement and may improve

microcirculation. Its regular administration, along with *shamana aushadhis*, may have contributed to stabilization of visual function, suggesting its usefulness as a safe supportive modality in chronic retinal vascular disorders such as STBRVO.

Nithya Virechana with Gandharvahastadi Taila was employed considering the underlying involvement of *Pitta–Rakta duşti* associated with *Vata*-induced *srotorodha*. *Nithya Virechana* is indicated in chronic conditions where mild, regular elimination is required to maintain *doşha* balance without causing depletion. *Gandharvahastadi Taila*, owing to its *mrudu virechaka*, *Vata-anulomana*, and *Pitta-shamaka* properties, facilitates daily expulsion of vitiated *doşas*, reduces *avarana*, and supports proper *srotas* patency. By maintaining bowel regularity and systemic *doşha* equilibrium, *Nithya Virechana* may indirectly aid in reducing vascular congestion and ischemic stress in retinal tissues. Its use alongside *shamana aushadhis* and conventional ophthalmic management may have contributed to disease stabilization, highlighting its role as a safe and effective adjuvant in chronic retinal vascular disorders such as STBRVO.

CONCLUSION

Mixed retinopathy with superotemporal branch retinal vein occlusion is a chronic, vision-threatening retinal vascular disorder often associated with long-standing diabetes and hypertension. In this case, visual deterioration persisted despite conventional interventions such as laser photocoagulation and intravitreal steroid injections, highlighting the limitations of localized ocular therapies when systemic pathology remains unaddressed.

Ayurvedic management, correlating the condition with *Sannipataja Timira* involving *Pitta–Rakta duşti* and *srotorodha*, focused on systemic purification, metabolic correction, and ocular nourishment. Therapies including *Virechana*, *Pratimarsha Nasya*, *Padabhyanga*, *Nitya Virechana*, and *shamana Auşadhis* led to stabilization of visual acuity, reduction in subjective symptoms, and improved visual comfort without adverse effects. Although numerical visual improvement was limited due to chronic ischemic changes, arresting further deterioration is clinically significant. Larger controlled studies are required to validate these findings.

REFERENCES

1. Hayreh SS. Retinal vein occlusion. *Indian J Ophthalmol*, 1994; 42(3): 109–32.
2. Rogers S, McIntosh RL, Cheung N, Lim L, Wang JJ, Mitchell P, et al. The prevalence of retinal vein occlusion: pooled data from population studies. *Ophthalmology*, 2010; 117(2): 313–9.
3. Klein R, Klein BEK, Moss SE. The Wisconsin Epidemiologic Study of Diabetic Retinopathy. *Arch Ophthalmol*, 1984; 102(4): 520–6.

4. Mitchell P, Smith W, Chang A. Prevalence and associations of retinal vein occlusion in Australia. *Arch Ophthalmol*, 1996; 114(10): 1243–7.
5. *Sushruta, Sushruta samhitha, Nibandha sangraha* Sanskrit commentary, *sushruta uttarasthana* 8th chapter, verse 23.24, Editor *jadavji trikamaji Acharya*, 9th edition Varanasi: *Chaukambha surabharathi prakshalana*, 2023; pg num 607.
6. Priyanka, Rani1; Veeranagouda, Adoor1; Ramesh, B N2; Dhiman, K. S1; Manjusha, R.1 From 5th World Ayurveda Congress 2012 Bhopal, Madhya Pradesh, India. 7-10 Dec 2012. OA01.36. Management of diabetic retinopathy with *doorvadya ghrita tarpana* and internal administration of *mahavasadi kwatha*- a comparative study. *Ancient Science of Life*, 32(Suppl 1): p S36, December 2012.