



CASE REPORT

Ayurvedic Perspective and Management Of Lateral Rectus Palsy: A Case Report

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Abstract

Background: Sixth cranial nerve palsy is a neurogenic cause of paralytic squint, commonly presenting with binocular diplopia and restricted lateral gaze. It is often associated with systemic conditions such as diabetes mellitus. Conventional management, including systemic control and use of prism glass may not always yield satisfactory recovery¹. This case explores the outcome of Ayurvedic management in such a scenario.

Case Presentation: A 49-year-old male with a history of uncontrolled diabetes mellitus presented with sudden-onset diplopia and restricted abduction of the left eye. Ocular examination revealed incomitant squint and diabetic retinopathic changes on fundus evaluation. MRI ruled out infarct or mass lesion, and the patient was diagnosed with sixth nerve palsy. He experienced minimal improvement with conventional treatment and sought for Ayurvedic care.

Diagnosis: Based on Ayurvedic principles, the condition was assessed as *Vata Paryaya*, *Ekangavata*, and *Dwiteeya patala gata timira*, involving *Vata*-predominant *Tridoshic* vitiation affecting *Rasa*, *Rakta* and *Mamsa Dhatus*^{2,3}.

Intervention: Treatment included *Rooksha poorva Snehapana*, *Virechana*, *Nasya*, *Takradhara*, *Jalukavacharana*, *Tarpana*, and *Yoga Vasthi*. Internal medications like *Nisakathakadi Kashaya*, *Punarnavadi Kashaya*, *Yoga Raja Guggulu*, and *Dhanwantharam Gulika* were used to target systemic and ocular dysfunction.

Outcome: Following treatment, the patient experienced complete resolution of diplopia along with marked improvement in ocular movements, eye alignment, and visual function. Additionally, systemic diabetic parameters showed improvement.

Conclusion: This case highlights the efficacy of individualized Ayurvedic treatment in a case of sixth nerve palsy unresponsive to conventional care. The multimodal Ayurvedic approach targeting systemic doshic imbalances and local dysfunction demonstrated promising results^{4,5}.

Introduction

Paralytic squint, or paralytic strabismus, is a type of Incomitant squint in which the misalignment of the eyes varies depending on the direction of gaze and the eye being used for fixation⁶. Unlike concomitant squint, where the angle of deviation remains constant in all directions, paralytic squint is due to complete or partial paralysis of one or more extraocular muscles, resulting in uncoordinated ocular movements. This condition arises from motor imbalance caused by neurogenic, myogenic, or mechanical factors. The most commonly involved nerve is the sixth cranial nerve (abducens), which innervates the lateral rectus muscle, and its paralysis results in an inability to abduct the eye and causes esotropia. Patients typically present with symptoms such as diplopia (double vision), especially in the field of action of the paralyzed muscle, along with ocular motility restriction and compensatory head postures aimed at minimizing visual discomfort. Secondary deviation, noted when the unaffected eye is covered, is greater than the primary deviation due to increased neural stimulation. Unlike congenital squint, suppression and amblyopia are usually absent, particularly in adult-onset cases⁷. Etiological factors include vascular causes (like diabetes and hypertension), trauma, infections, neoplasms, demyelinating disorders, toxins, and neuromuscular conditions such as myasthenia gravis. Mechanical causes like orbital fractures or space-occupying lesions may also contribute. Clinical evaluation involves detailed history taking, ocular motility tests in all gaze positions, cover-uncover and alternate cover tests, diplopia charting, Hess screen testing, and forced duction tests to rule out mechanical restrictions. Neuroimaging and systemic investigations are often essential to identify underlying causes. Management of paralytic squint is based on the etiology and may include conservative treatment such as controlling systemic disease, prism correction, botulinum toxin injections, or surgical correction like muscle resection or recession in chronic cases⁸.

According to Ayurveda, the condition can be interpreted as a *Vata-pradhana Sannipata* type of *Dosha Dushti*. Its management involves careful evaluation of the causative factors (*nidana*) along with proper assessment of the involved *dosha* and *dushya*. The symptoms, including diplopia (*dwithikam drishti madyasthe*)⁹ and visual disorientation (*gochara vibramath*)¹⁰, resemble those of *Dwiteeya Patalagata Timira*. The presence of headache and early-stage microphthalmos also points toward a *Vata Paryaya*¹¹ manifestation. In a broader context, this can be classified under *Ekanga vata*¹², a form of localized paralysis. Therapeutic interventions like *Takradhara*, *Virechana*, *Nasya*, *Jaloukavacharana*, and internal medicines aimed at pacifying *Vata* and *Rakta* have been effectively used to alleviate symptoms and restore normal ocular functions.

CASE REPORT

Chief complaints

The patient reports that he has been experiencing double vision for the past one month. He also states that he is unable to move his left eye fully towards the side during this period. Additionally, he complains that bright light causes discomfort in his eyes.

History of Present Illness

A 49-year-old male patient, a known case of diabetes mellitus for the past eight years, with medical history of angiogram on 2018. The symptoms began following an episode of severe sleeplessness, after which the patient noticed double vision and overlapping of images. There was no history of trauma, fever, recent infection, or headache at the time of onset. He first consulted a modern hospital on 14/02/2025, where a contrast-enhanced MRI of the brain was performed and found to be normal. He was advised to take Ecospirin regularly.

As the symptoms persisted, he sought further evaluation at another hospital on 03/03/2025, where he was diagnosed with left sixth nerve palsy and bilateral mild non-proliferative diabetic retinopathy (NPDR). Prism glasses were prescribed, but the patient was unwilling to use them. With no significant improvement despite the allopathic management, he opted for Ayurvedic treatment.

He subsequently visited our OPD on 17/03/2025 seeking Ayurvedic intervention and was admitted to the Inpatient Department on the same day for further evaluation and management.

MEDICATIONS

The patient was on Ecospirin AV 150 mg, taken once at night, Glyciphage SR 100 mg twice daily (morning and evening), and Insulin, 28 units in the morning and 20 units in the evening. He was also taking Janumet 50/500 mg once daily after lunch.

FAMILY HISTORY-Nothing relevant

PERSONAL HISTORY

- Bowel-regular
- Appetite-good
- Micturition - frothy
- Sleep: Reduced over last few weeks
- Addictions: Occasional alcohol intake
- Smoking- daily
- Diet: Includes curd, milk, egg, fish (aggravating Kapha and Pitta)
- Stress: Present
- Allergy (dust, cold)

INVESTIGATIONS

- HbA1C- 11.5 %
- FBS- 105 mg%
- PPBS- 161 mg%
- On 19/03/25
 - HDL- 37mg%
 - T.Cholesterol - 100mg%
 - Total protein- 6.2 mg %
 - S.Uric acid- 3.3mg%
- On 9/5/25
 - FBS-139 mg%
 - PPBS-305 mg%
 - HbA1C-8.2 %
- On 14/5/25
 - FBS-117 mg%
 - PPBS-147 mg%

MRI BRAIN on 14/2/25

- No e/o acute infarcts or Intracranial bleed
- No significant abnormality in screening MRI of Brain
- Mild mucosal thickening in b/l ethmoid and sphenoid sinus
- The orbits and their contents appear normal

NEUROLOGICAL EXAMINATIONS

CLINICAL EXAMINATION

- External examination
 - Head posture- turn towards left side
 - Eyeball- No abnormalities detected (B/L)
 - Eyelid- No abnormalities detected (B/L)
 - Upper palpebral conjunctiva- normal(B/L)
 - Lower palpebral conjunctiva- normal(B/L)
 - Bulbar conjunctiva - degenerative changes
 - Cornea- Arcus senilis(B/L),
 - Lens - IMSC(B/L)
 - Pupillary reaction -brisk (B/L)
 - IOP (On 17/03/25-RE:17 mm hg, LE:17.3 mmHg)
- Ocular movements
 - **Left Eye (LE)**
 - Abduction: Not possible
 - Adduction: Normal
 - Elevation (Supraduction): Normal
 - Depression (Infraduction): Normal
 - Dextroversion (Right gaze): Restricted
 - Levoversion (Left gaze): Restricted
 - Up gaze: Normal
 - Down gaze: Normal
 - **Right Eye (RE)**
 - All ocular movements: Full and normal (Adduction, abduction, elevation, depression, and all versions normal)
 - No diplopia - with 5 Δ Base out in left eye
 - On 17/03/25 -HCRT (Hirschberg corneal reflex test)15 degree Esotropia for distance - Left eye
- Squint evaluation
 - **Cover Test**
 - Manifest esotropia noted in primary position.
 - **Uncover Test**
 - Left eye shows refixation movement, confirming manifest deviation.
 - **Alternate Cover Test**
 - Secondary deviation > primary deviation, suggestive of left lateral rectus palsy
- Undilated fundus evaluation
 - Mild Non proliferative diabetic retinopathy (BE)
 - Media: clear (B/L)
 - Optic disc: Circular and well defined margins (B/L)
 - CDR:0.3(B/L)
 - Vessels :Mild sclerotic changes in artery (B/L)
 - Macula:Seems unhealthy (B/L)
 - General fundus: dot hemorrhages, Tesselated (B/L)
- OCT -On 19/03/25
 - CMT- RE: 284 μm
 - LE:282 μm
- Slit lamp evaluation evaluation
 - Conjunctiva: No congestion
 - Cornea: Clear, no pathology (confirmed with fluorescein dye test)
 - Pupillary reactions: Normal
 - Anterior chamber: No signs of uveitis (no circumciliary congestion, cells/flare, or keratic precipitates)



Figure 1: Restricted ocular movement (on 19/03/2025)

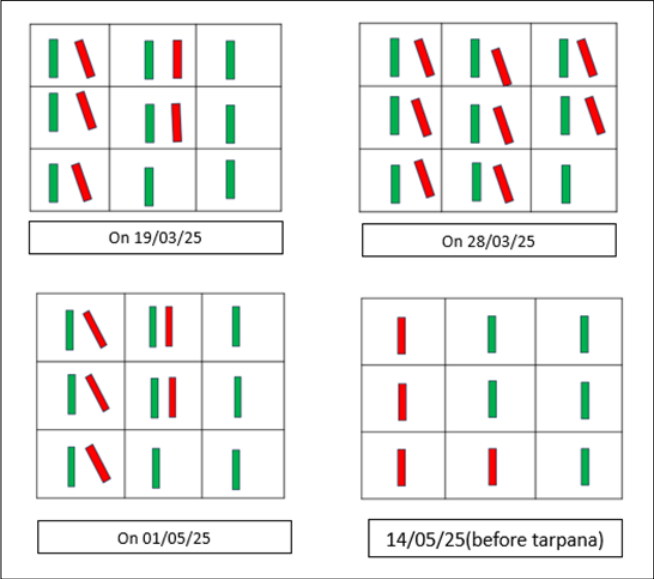
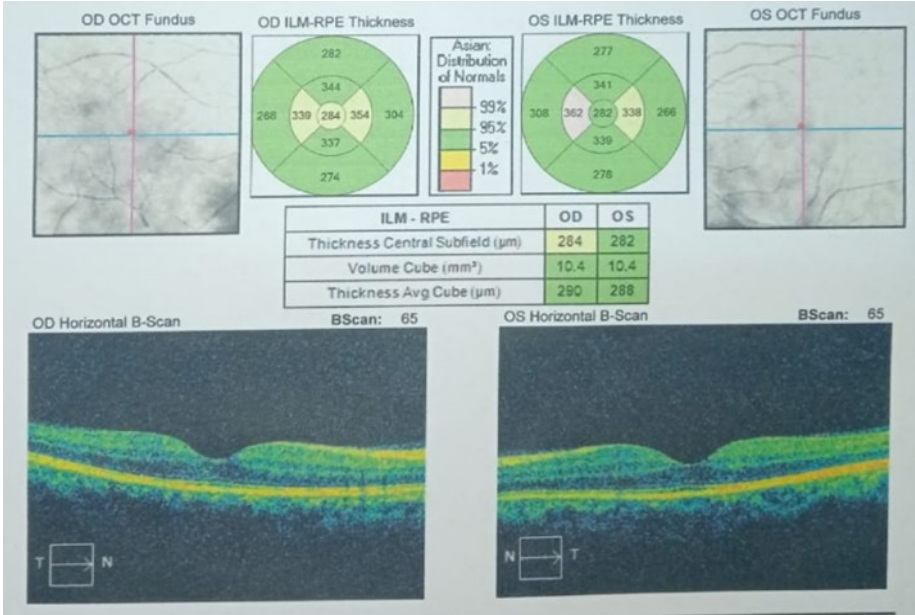


Figure 2: Diplopia charting during treatment, patient got rid of diplopia during treatment period (before tarpana)

OCT scan on 19/03/25



Visual acuity evaluation

DATE	UCVA (Un corrected visual acuity)				BCVA (Best corrected visual acuity)			
	RE		LE		RE		LE	
19/03/25	6/18	N18	6/24	N18	6/6	N8	6/9	N8
4/4/25	6/18	N10	6/24	N10	6/6	N6(B)	6/9	N6(B)
10/4/25	6/18(P)	N10	6/18(P)	N10	6/6	N6	6/6(P)	N6
24/04/25	6/24	N8	6/18	N8	6/6	N6	6/6	N6
1/5/25	6/18(B)	N8	6/18(-1)	N8	6/6	N6	6/6	N6
14/5/25	6/18	N8	6/18(-1)	N8	6/6(B)	N6(B)	6/6	N6
2/6/25	6/18	N8	6/18(-1)	N8	6/6(B)	N6(B)	6/6	N6

ASHTA STHANA PAREEKSHA

Nadi	Drutham
Mootra	Avilam
Mala	Badham
Jihwa	Anupaliptham
Sabdha	Spashtam
Sparsa	Anushna seeta
Drik	Athavykam
Akrithi	Madhyama

DASA VIDHA PAREEKSHA

Dooshya	Dosha-vata pradhana tridosha Dooshya- rasa,raktha,mamsa
Desha	Bhoomi –sadharamam Deha - akshi
Bala	Roga – Madhyama Rogi – madhyamam
Kala	Kshanadi – sisiram vyadhyavastha- navam
Analam	Madhyamam
Prakrithi	Vata pitha
Vaya	Madhyamam
Satwa	Madhyamam
Satmya	Sarva rasa satmyam
Ahara	Abhyvahanana Sakthi , jarana Sakthi- madhyama

Ayurvedic Diagnosis

- **Vyadhi:** Vata Paryaya (Anayatovata, Ekanga Vata), Dwithiya Patala Gata Timira
- **Dosha Involvement:** Vata predominant Tridosha
- **Dhatu:** Rasa, Rakta, Mamsa
- **Srotas:** Rasa vaha, Rakta vaha, Mamsa vaha
- **Vyadhi Avastha:** Nava
- **Rogi Bala:** Madhyama
- **Adhishtana:** Sarvakshi

TREATMENT GIVEN

Internal medication

MEDICINE	DOSE	DATE
Nisa kathakadi kashaya +	90 ml, BD, before food 6 AM & 6 PM	19-03-2025 to 20-05-2025
Punarnavadi kashaya	1 BD, before food with Kashaya	19-03-2025 to 20-05-2025
Chandra Prabha gulika	1 tsp before food - Afternoon	19-03-2025 to 20-05-2025
Vaiswanara choorna	1 BD, before food, with Kashaya	19-03-2025 to 20-05-2025
Yoga raja guggulu	1 BD After food	19-03-2025 to 20-05-2025
Sudrasanam gulika	1 BD After food	19-03-2025 to 20-05-2025
Dhanwantharam gulika	1 BD After food	19-03-2025 to 20-05-2025

External treatments

TREATMENT	MEDICINE	DATE	TIME
	Triphala Kashaya	20-03-2025 to 22-04-2025	
Sekam	Triphala + Dasamoolam Kashaya+ Maha masha tailam	23-04-25 to 14-05-25	9AM&5PM
Vidalakam	Triphala, Karuthavattu, Dhanymla in Left Eye	20-03-25 to 14-05-25	8AM&4PM
Talam	Dhanwantharam Tailam 101 Avarthi+ Kachooradi choorna	22/4/25 to 10-05-25	5 to 5.45 PM
	Pancha Gandha choorna + Ksheera bala 7 Avarthi	12-05-25 to 17-05-25	

PREPARATION OF PUTAPAKA

Two hundred and fifty millilitres of milk and one hundred grams of deboned mutton meat were taken along with thirty grams of Jeevaniya gana choorna and ground thoroughly to obtain a homogeneous mixture. The mixture was wrapped in a fresh plantain leaf, coated with clay, and then covered with sand. The prepared bundle was subjected to heating over fire until adequately cooked. After self-cooling, the sand, clay layer, and plantain leaf were removed. The cooked material was

TREATMENT	MEDICINE/DOSE	DURATION	TIME
Dhanyamla dhara Whole body & Head	Dhanyamla	21-03-25 to 27-03-25 (7 days)	10AM
Takradhara-Head	Mustha kalka, Amalaki kashaya	29-03-25 to 04-04-25 (7 days)	10AM
Vicharana snehapana	Patoladi gritham – 25 ml morning and evening after 1.5 hour after intake of food.	05-04-25 to 07-04-25 (3 days)	10AM& 9PM
Abhyabga and Ushmasweda	Satahwadi tailam	08-04-25 (1 day)	11 AM
Virechana	Gandharva eranda (25 ml)+ milk	09-04-25 (1 day)	6AM
Marsa nasyam	Shadbindhu tailam- Starting dose-1ml Then increased upto 5 ml	10-04-25 to 16-04-25 (7 days)	9AM
Sirodhara	Dhanwantharam taila(3/4 th)+ Karpasasathyadi tailam (1/4 th)	17-04-25 to 23-04-25 (7 days) for 30 minutes	10 AM
Jalukavacharanam	Site – left outer canthus, forehead	19/4/25 to 05-05-25 (8 sittings)	4 PM
Abhyangam & Matra vasthi	Dhanwantharam tailam(1/2)+ Kottamchukkadi taila (1/2) Dhanwantharam mezhu pakam- 60 ml	24/4/25 to 28-04-25 (5 days)	2PM
Yoga vasthi	Sneha vasthi- Dhanwantharam mezhu pakam- 120 ml Kashaya vasthi- Eranda mooladi Kashaya-250 ml, Kalka-Triphala + Sata pushpa-30 gm, Dhanwantharam mezhu pakam- 60 ml,honey-100 ml, saindhava- 15 gm	06/5/25 to 13-05-25 8 days	Kashaya vasthi-11AM Sneha vasthi -2PM
Tarpanam	Patoladi gritham Poorva karma- Kaya sodhana by Virechana, shira sodhana by Nasyam Paschat karma- Dhoomapana	15-05-25 to 19-05-25 5 days- 20 minutes all days	9 AM
Putapakam	Jeevaniya gana Putapaka swarasa followed by Mallika pushapa bandhana at night	20-05-25 (1 day) for 10 minutes	9AM

transferred into a clean cloth and squeezed firmly to extract the medicated liquid. The expressed juice thus obtained was used in sufficient quantity for the administration of *Putapaka*

FOLLOW UP AND OUTCOME

Therapeutic outcomes

- Diplopia resolved (Figure :4)
- Abduction movement restored in left eye (Figure:3)
- Esotropia and compensatory head posture disappeared

Squint evaluation: On 17/4/25 HCRT- Central

Cover test, Uncover test, Alternate cover test- Normal



Figure :3-Extra ocular muscle movements during follow up visit

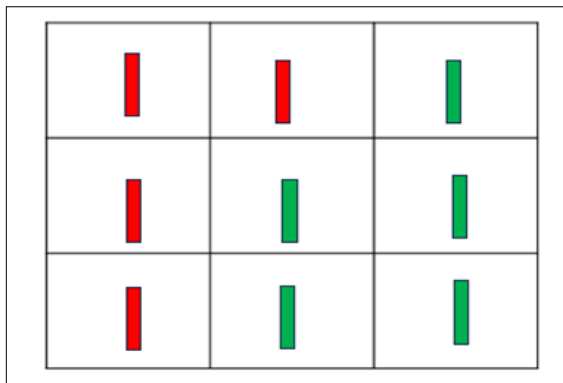


Figure 4: diplopia charting during follow up visit (02/06/25)

Discussion

This case demonstrates the potential of Ayurvedic protocols in the management of neurogenic paralytic squint in a diabetic individual, especially when conventional therapies show limited results. Neuro-ophthalmological disorders are predominantly attributed to the vitiation of Vata Dosha, either due to Dhatu Kshaya or Avarana. Therefore, the primary objective of treatment is to restore and maintain the normalcy of Vata Dosha, with therapeutic measures tailored according to the specific pathogenesis and the involvement of other Doshas.

Anyatovata results from the vitiation of *Vata Dosha* at sites other than the eye, particularly in the *Shiras*, with its effects manifesting in the ocular region. As described by Vagbhata, it is characterized by pain involving the *Manya*, *Akshi*, and *Sankha* regions. Sushruta has further described pain manifestations in

the *Avatu*, *Karna*, *Manya*, *Hanu*, *Netra*, and *Bhru* regions.

Additionally, *Vataparyaya* encompasses ocular manifestations associated with structural and functional alterations. Features such as *Jihma Akshi* can be correlated with squint, while *Una Akshi* denotes a reduction in eye size, comparable to microphthalmos, thereby highlighting its relevance in neuro-ophthalmic conditions.

Addressing both systemic derangements such as *Vata raktha dushti* and local structural dysfunction such as *Snayu dushti* led to the restoration of ocular motility and visual function.

This case highlights the possibility of ischemic cranial neuropathy in a diabetic patient leading to sixth cranial nerve palsy, along with the limitations of symptomatic allopathic treatment. The patient's reluctance to use prism glasses and his search for alternative treatment options led him to explore Ayurvedic therapy. The pathology of *Vataparyaya* in which vata located in shiras get vitiated can be analysed as resulting from vitiation of Kapha dosha and *Kleda* formation in Soumya dhatu, along with *Margavarana* of *Vata dosha*, ultimately leading to paralysis of the sixth cranial nerve.

The treatment principles aimed at removal of deep-seated ama and reduction of edema, thereby mobilising the vitiated doshas from the peripheral tissues back to the gastrointestinal tract, followed by purification of blood and pacification of Vata dosha. Internal medicines such as *Nishakathakadi kashaya* and *Punarnavadi kashaya* were administered to control *Kleda*, relieve *Kapha avarana*, and achieve *Kapha shamana*. *Chandraprabha gulika* was prescribed to manage *Prameha roga*, edema, and impaired digestive fire. *Vaiswanara choorna* was given for *vata anulomana*. In addition, this formulation possesses *Tridosha shamana* properties and acts as a *Rasayana* drug. *Yogaraja guggulu* and *Dhanwantaram* tablet were administered to address locally vitiated *Vata dosha*. *Sudarsanam gulika* was given as the patient experienced headache during the initial phase of treatment.

External therapies such as *Sekam* and *Vidalaka* were administered in the initial phase for reduction of edema and removal of ama, and in the later phase for pacification of *Vata dosha*. *Talam* was applied for pacification of *Vata dosha* affecting the head. *Dhanyamla dhara* and *Takra dhara* were performed for reduction of *Kleda* and generalised edema. *Vicharana snehapana*, *Virechana*, and *Abhyanga* were employed to bring the vitiated doshas back to the gastrointestinal tract and to facilitate normal downward movement of *Vata*. *Nasya* therapy was administered for purification of the organs above the clavicle and strengthening of the sensory organs. *Jalaukavacharana* was performed for purification of blood.

Sirodhara and *Tarpana* were given to pacify Vata dosha and strengthen the sensory organs. Finally, *Yogavasti* and *Matravasti* were administered for pacification of Vata dosha located in the large intestine and to prevent recurrence of the disease.

Conclusion

Ayurvedic treatment provided a reliable and safe approach in managing paralytic squint resulting from sixth nerve palsy, leading to notable improvements in eye coordination and visual function. This line of treatment can be a useful complement to modern medical methods, particularly in long-standing or treatment-resistant cases. The condition exemplifies how systemic illnesses can present through ocular symptoms. In Ayurveda, the focus was on managing the primary disease, *Prameha*, while also working to draw the vitiated *doshas* from the periphery (*Sakha*) back to the digestive system (*Koshta*). For *Drishti rogas*, classical texts stress the importance of a multi-modal treatment plan, as a single therapy is often insufficient for complete recovery. This reflects Ayurveda's unique strength-its individualized treatment approach. Since each patient's disease manifestation and causative factors differ, Ayurvedic care emphasizes eliminating the root cause (*Nidana parivarjana*) and interrupting disease progression (*Samprapti vighatana*) through thoughtful and tailored therapeutic choices.

Patient Perspective

Since February, I had been suffering from double vision and difficulty moving my left eye, which affected my work and daily activities. I found it difficult to drive, interact with people, and sleep properly. After Ayurvedic treatment, my double vision gradually reduced and my eye movements improved. I am now able to work comfortably, interact normally, and sleep better. I am thankful for the improvement and wish to share my experience for the benefit of others.

Declaration of Patient Consent

Written informed consent was obtained from the patient for publication of this case report. Patient confidentiality has been maintained to the best possible extent.

Conflict of Interest

The authors declare that they have no financial or non-financial conflicts of interest in relation to the publication of this case report.

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None declared

References

1. Rucker JC. Cranial neuropathies. *Curr Opin Neurol*. 2004;17(1):35–40.
2. Vaidya JT, ed. *Sushruta Samhita of Sushruta with Nibandha Sangraha Commentary by Dalhana*. Varanasi: Chaukhambha Orientalia; 2012. Sutrasthana, Ch. 33.
3. Murthy KRS. *Ashtanga Hridaya of Vagbhata*. 3rd ed. Varanasi: Krishnadas Academy; 2000.
4. Patwardhan B, Warude D, Pushpangadan P, Bhatt N. Ayurveda and traditional Chinese medicine: a comparative overview. *Evid Based Complement Alternat Med*. 2005;2(4):465–473.
5. Reddy KR. Principles of Ayurveda Therapy in Eye Diseases. *Int J Ayurvedic Med*. 2010;1(2):43–47
6. Khurana AK, Khurana A, Khurana B. Comprehensive Ophthalmology. 9th ed. New Delhi: Jaypee Brothers Medical Publishers Pvt Ltd; 2023. Chapter 14, Ocular motility and strabismus. p. 334
7. Ahuja L. Manual of squint. first edition. Vol. 1. New delhi: Jaypee; 2008
8. Sihota R, Tandon R. Incomitant strabismus. In: Sihota R, Tandon R, editors. *Parsons' Diseases of the Eye*. 22nd ed. New Delhi: Reed Elsevier India Pvt. Ltd.; 2015. p. 433.
9. Vāgbhaṭa. *Aṣṭāṅgahṛdaya*, with the commentaries Sarvāṅgasundara of Arunadatta and Āyurvedarasāyana of Hemādri. Edited by Paradakara HS, annotations by Kuṇṭe AM, Nāyare KR. Uthara sthana ,Chapter 12, Shloka 4. Varanasi: Chaukhamba Sanskrit Sansthan; Reprint edition 2016. p. 916.
10. Sushruta. *Sushruta Samhita of Sushruta*. Uttara Tantra, Drishtigata Roga Vinjaneeyam, Chapter 7, Shloka 10. In: Sharma PV, editor. Varanasi: Chaukhambha Orientalia; 2007. p. 606. (Jaikrishnadas Ayurveda Series No. 34).
11. Vāgbhaṭa. *Aṣṭāṅgahṛdaya*, with the commentaries Sarvāṅgasundara of Arunadatta and Āyurvedarasāyana of Hemādri. Edited by Paradakara HS, annotations by Kuṇṭe AM, Nāyare KR. Uthara sthana ,Chapter 15, Shloka 13. Varanasi: Chaukhamba Sanskrit Sansthan; Reprint edition 2016. p. 929.
12. *Agnivesha. Charaka Samhita, with English translation and critical exposition by Sharma RK, based on Cakrapanidatta's Ayurveda Dipika commentary. Chikitsa Sthana, Chapter 27, Shloka 55. Varanasi: Chowkhamba Sanskrit Series Office; Reprint edition 2016. p. 35.*

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