

Efficacy of Ayurvedic Interventions in Management of lateral Rectus palsy: A Case Study

Dr.Fizza S Sheikh¹ Dr.Govind Tundalwar² Dr.Barkha Jadhav³

¹PG Scholar, Department of Shalaky Tantra, Shri Ayurved Mahavidyalaya, Nagpur

² HOD and Professor, Department of Shalaky Tantra, Shri Ayurved Mahavidyalaya, Nagpur

³PG Scholar, Department of Shalaky Tantra, Shri Ayurved Mahavidyalaya, Nagpur

Date of Submission: 07-03-2026

Date of Acceptance: 19-03-2026

ABSTRACT

Abducens nerve (sixth cranial nerve) supplies the lateral rectus muscle of the eye. In patients with sixth nerve palsy, diplopia is the most common presenting symptom. Patient will have horizontal Diplopia which is greater at distance, which worsens in the direction of the palsied muscle and gets better in the contralateral gaze. Vasculopathic risk factors such as diabetes mellitus and hypertension are common in elderly people due to microvascular ischemia. Treatments options with sixth nerve palsy include alternate patching, prism therapy, strabismus surgery and botulism injections. In *Ayurveda* symptoms of *Dwitiya patalgat Doshdushti (Timir)* by *Acharya Vagbhata* and *trutiya patalgat Doshdushti (Timir)* by *Acharya Sushruta* can be correlated with Diplopia. *Snayugat* Vitiation of vata dosha leads to *Ekangavat* which causes constriction of *sira* and *snayu*. Thus Sixth nerve palsy can be correlated with *Ekangavat* and *timir*. *Tarpan* is usually practiced *kriya* in *netra chikitsa* which is *Brimhana* (nourishing) in nature. *Tarpan* is *snigdha kriya* indicated in *vata dushta* ophthalmic conditions mainly in *drushtigat rogas*. This procedure helps to nourish eyes, increase blood circulation to the affected area, gets rid of *Dosha* imbalances, strengthens the muscle in the area helps in improving eyesight. **Case:** A 56 Year male presented to the Ophthalm OPD with the complaints of diminished vision of left eye and diplopia and left eye pain and straining since 2 months. He was known case of Diabetes mellitus since 1 year and was on regular medication. He was treated with 3 cycles of *tarpan* each cycle consisting of 7 days and *nasya* and other oral ayurvedic medicines. **Conclusion:** Ayurvedic treatment has provided satisfactory results and provided relief from the symptoms.

Keywords: Diplopia, Abducens nerve, *Timir*, *nasya*

I. INTRODUCTION:

Sixth nerve palsy refers to paralytic strabismus (ocular deviation) resulting from complete or incomplete paralysis of the lateral rectus muscle of the eye. Cardinal symptom is a horizontal and uncrossed diplopia which aggravates when looking in the direction of palsied eye, primarily affecting distant vision rather than near vision. Aetiology Causes of sixth nerve palsy include 1) Diabetes mellitus, hypertension, Atherosclerosis in which microvascular ischemic changes cause damage to small blood vessels that nourish the nerve. 2) Neoplastic lesions 3) Inflammatory lesions 4) Trauma 5) Increased intracranial pressure. Diagnostic work up for sixth nerve palsy includes dilated fundus examination to rule out optic disc edema, laboratory investigations like CBC, HbA1C and BSL test to assess for microvascular causes. Imaging (MRI-brain and orbit) help in assessing the malignancy, aneurysm, stroke. Diabetes mellitus, hypertension, and hypercholesterolemia causes the microvascular mononeuropathy which is most commonly found cause for isolated sixth nerve palsy.

Treatment modalities for sixth nerve palsy include alternate patching or fogging, prism therapy, strabismus surgery and botulism injections for long standing deviation of six months or more than that. As per *ayurveda*, in this condition *acharya vagbhata* has mentioned diplopia in *dwitiya patalgat timir* whereas *acharya sushruta* has included diplopia under *tritiya patalgat timir*.

Also sixth nerve palsy can be treated on the same line as that of *ekangavata*. As mentioned in *charak samhita*, aggravated *vata* fills up the empty *strotas* (channels) in the body, resulting into different ailments affecting any one part of the body. *siragat and snayugat* vitiation of *vata dosha* leads to *ekangavat*. It causes constriction of *sira* and *snayu*, which can be correlated with pathogenesis of isolated sixth nerve palsy.

Case Presentation

A 56 Year old male diagnosed patient of Lateral Rectus muscle Palsy presented to shalakyatantra OPD of Shri ayurved mahavidyalay Nagpur with complaints of both eye diminished vision, Diplopia which increases during lateral gaze, restricted movement of left lateral rectus muscle in lateral gaze. Other associated complaints were left eye pain, left eye straining, headache since 2 months. He was known case of Diabetes mellitus

type 2 since 11 years and on regular antidiabetic medicines. so he consulted here for Ayurvedic management.

Past History : k/c/o – DM Type 2 since 11 years(ON regular medication)

N/H/O – HTN/TB/BA N/H/O – Allergy, addiction, trauma

H/O – Paan Addiction(Without Tobacco) since 3 years

Family History: No Any Relevant family history

Examination:

Table 1: Visual Acuity

	Distant Vision	Near Vision
Bilateral	6/9(p)	N/6
Right	6/6	N/6
Left	6/12	N/6

Table 2: Examination of Eye

	OD	OS
Eyelashes	Normal	Normal
Eyelids	Normal	Normal
Conjunctiva	Normal	Normal
Cornea	Normal	Normal
Pupil	NSRTL	NSRTL
Lens	Lens changes	Lens changes
IOP	15.9mm Hg	17.3mm Hg
EOM Motility	Normal	Difficulty to abduct left eye i.e left eye esotropia
Fundoscopy Examination	Not suggestive of any pathology	Not suggestive of any pathology

Diagnostic Criteria

Ocular Examination

Head Posture : No Facial asymmetry

Ocular Posture:

Hirschburgs corneal reflex test: Light reflex appeared outwardly deviated from centre of the pupil. 45 Degrees Esotropia in the left eye.

Cover Test

A) With Distant Target

On covering RE there was outward movement of left eye (LE esotropia)

B) With Near Target

Left eye esodeviation was more for distant vision than for near fixation

Uncover Test RE: Outward movement of left eye
LE: No Movement

Alternate Cover test: LE Constant Esotropia
Cranial Nerve Examination: Shows Ipsilateral left abducens nerve palsy Laboratory tests and neuroimaging studies didn't show any suggestive cause. Patient was known case of DM Type 2 which is one the cause of microvascular changes.

Ayurvedic Management

Date	Treatment	Dose	Duration
25/6/25	<i>Triphala Ghrita Tarpan</i>	OD (1st Cycle)	7 days
	<i>Panchendriyavardhan taila pratimarsha nasya</i>	OD	1 Month
	<i>Tab laxmivilas ras</i>	2 BD	15 Days
	<i>Cap Guduchi</i>	2 B D	15 Days
16/7/25	<i>Triphala Ghrita Tarpan</i>	OD (2nd Cycle)	7 days

	<i>Cap Mahatriphala Ghrita</i>	2BD Before meal	15 days
	<i>Suvarnamakshik Bhasma with rason kalka</i>	OD	15 Days
11/8/25	<i>Triphala Ghrita Tarpan</i>	OD (3rd Cycle)	7 Days
	<i>Cap Mahatriphala Ghrita</i>	2BD Before meal	1 Month
	<i>Suvarnamakshik Bhasma with rason kalka</i>	OD	15 Days

II. Results:

There was a significant improvement in both signs and symptoms. Patient could appreciate reduction of diplopia. Horizontal distance between two images formed also reduced to a greater extent.

Complaints of eye pain and headache completely subsided. The symptoms like difficulty in abducting left eye in left lateral gaze, were completely relieved after ayurvedic management.



As it can be seen from above image, patient was not able to abduct left eye when finger movements was done from right to left side. After Treatment, patient was able to abduct left eye completely, which resulted in reduction of diplopia

III. Discussion:

Various pathologies may result in acute palsy of abducens / sixth cranial nerve. Abducens nerve palsy clinically presents with diplopia, inward deviation of the eye and difficulty with lateral ocular movement. The bodily doshas are eliminated by *Sodhana* or *Shamana Chikitsa*. The eye is the seat of

the *Alochaka Pitta* which is responsible for the vision perception, imbalance in *Alochaka Pitta* may lead to *Netra Vyadhi Lakshanas*. As per Ayurveda in this condition there is mainly vitiation of *Vata Dosha* as *Vata* is accountable for all normal activities.

Therefore, when there is abnormalcy of *Vata*; sensory and motor activities are often hampered. Considering these facts, *Brimhana* (replenishing / nourishing) line of treatment for correcting the vitiated *Vata Dosha* was adopted. Therefore *tarpan* was selected as main line of treatment.

Pratimarsha Nasya therapy was done through *Panchendriyavardhana Taila* which is administered through nasal root runs up to *Sringataka Marma* (Vital point of junction of blood vessels and nerve endings in the head region) and from *Shringataka Marma* reaches to various *Srotas* (Channels) and reduces the vitiation of *doshas*. With the help of *Nasya* nourishment to nervous system was provided through diffusion and also by neural and vascular pathway, hence improve the motor functions of nerves.[5] *Nasya* strengthens and nourishes the vessels which supply the *Jatru Urdwa Pradesha*. *Nasya* with *Panchendriya Vardhana* oil helps in relieving the obstruction of vitiated *Vata Dosha* in the *Murdha* (head) and it restores the normal functional ability of affected nerve It also helps to improves blood circulation to related areas of the brain.*Guduchi* is a *rasayan* with *tridoshahara*, *chakshushya* and *vishaghna* properties.*Suvarna makshik bhasma* is a potent *chakshushya rasayana* in ayurved. It is *raktashodhak*,*pittashamak*, and *vishaghna*.It supports visual ocular health and reduces inflammation. *Mahatriphala ghrta* is particularly effective in nourishing ocular tissues, enhancing *drishti* and preventing degenerative changes in the eyes.

IV. Conclusion:

Abducens nerve palsy is the most common ocular motor nerve palsy. The nerve is highly susceptible to injury due to its lengthy intracranial course. Most of the etiology have been recognized but the incidence of cases attributed to idiopathic causes are increasing. This case study focuses on thorough history, physical and neuroimaging examination which is essential to rule out sixth nerve palsy. Hence by adopting the ayurvedic line of treatment for managing complications of abducens nerve palsy satisfactory results could be obtained.

References:

- [1]. A.K Khurana, Comprehensive Ophthalmology, Jaypee Brothers Medical Publishers, New Delhi, 2019, 7th edition, Pg-81
- [2]. Slavin ML. Hyperdeviation associated with isolated uni lateral abducens palsy. Ophthalmology. 1989;96:512–6.
- [3]. Kaviraja Atridev Gupta Ashtanga Hridaya Uttarsthan, 12/1-7, Chaukhambha Sanskrit Varanasi; Edition Reprint 2011, Page No.667
- [4]. Kaviraj Ambika Datta Shastri, Shushruta Samhita Uttarantra 7/19, Chaukhambha Sanskrit Sansthan, Varanasi, Edition Reprint 2014, Page no.11.
- [5]. Tripathi Ravi Dutta, Astangasangrah, reprint 2005, Varanasi, Chaukhambha Sanskrita Pratisthana, sutra sthana chap 31/3, pg.no.528
- [6]. Tripathi Ravi Dutta, Astangasangrah, Sutrasthana 31/3, Chaukhambha Sanskrita Pratisthana, Varanasi. Reprint 2005, p. 528. 15.
- [7]. Narayan.J.vidhwansa Sharangdhar Uttarantra 11-13/Yogratnakar pg no 386,Vimal vision publication