CASE REPORT

Idiopathic Isolated (Right) Complete Oculomotor Nerve Palsy Management with Ayurvedic Treatment

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ABSTRACT

Aim: To assess the efficacy of ayurvedic treatment in isolated complete oculomotor nerve palsy by subjective evaluation.

Materials and methods: Prospective interventional case report supplemented by ayurvedic treatment. Using a subjective evaluation, outcome was defined according to patient's perspective based on improvement in eye movement and ptosis. A patient 33-year-old male resident of Delhi running a private business in marketing presented with complaints of not being able to open his right eye along with decreased movements. He was apparently well 2.5 months back, then he developed nausea and vomiting for 1 week and headache (on right half). With these complaints the patient came to Netra Roga outpatient department (OPD) no 15 (ophthalmology) of Shalakya Tantra Department at Ch. Brahm Prakash Ayurved Charak Sansthan. He took treatment for 2 months and got complete remission in his symptoms.

Conclusion: Ayurvedic treatment definitely has a role in chronic disease like different types of palsies especially oculomotor nerve palsy. A case series or pilot study should be conducted in similar cases to validate the above case report, which may prevent or treat many cases of oculomotor palsies.

Keywords: Ayurveda, Ayurvedic treatment, Oculomotor palsy, Ophthalmology, Shalakya Tantra.


Source of support: Nil
Conflict of interest: None

INTRODUCTION

Oculomotor nerve supplies the majority of the muscles controlling eye movements, i.e., four extraocular muscles (medial rectus, superior rectus, inferior rectus, and inferior oblique) and levator palpebral superioris along with sphincter pupillae and ciliary muscles.

Disease Review: Oculomotor or third nerve palsy is an eye disease resulting from damage to third cranial nerve or its branches. Therefore, its damage leads to improper movements of the affected eyeball. There are mainly two types of third nerve paresis: Central (sparing pupil) and peripheral (with pupillary involvement). As this nerve is also responsible for upper eyelid movement (levator palpebral superioris) and pupillary constriction (sphincter pupillae), its damage makes the affected individual unable to maintain normal alignment of their eyes leading to strabismus (outward and upward rotation of eye), consequent diplopia and loss of pupillary reactions. Causes of oculomotor palsy mainly consist of neoplasm, trauma, ischemic lesion, diabetes mellitus, hypertension, aneurysm of carotid artery, infections, and idiopathic. Incidence of about 25% is found in idiopathic ipsilateral third nerve palsy. Ischemic vascular lesion is usually characterized by sparing of pupil and if pupil is involved then cause must be other than ischemic vascular lesion. In aneurysm of carotid artery, fixed and dilated pupil is usually characterized by large exotropia, hypotropia. Intorsion of eye occurs when patient tries to adduct it because of normal action of superior oblique muscle. After cavernous sinus, oculomotor nerve passes alongside the posterior communicating artery. Aneurysm of posterior communicating artery results in compression of third nerve leading to isolated nerve paresis with involvement of pupil. Painful oculomotor nerve palsy may be due to Tolosa–Hunt syndrome, diabetes, and migraine. Its management comprises oral and injectable multivitamins along with treatment of the cause.

A male patient 33 years old, resident of Delhi, running a private business in marketing was apparently well 2.5 months back (March 2017), then he developed nausea and vomiting (occasional) and headache (pulsatile, continuous, throbbing pain on right half), which persisted for 1 week. Also he was unable to open his right eye with decreased eye ball movements. He took allopathic medicines (from March 2017 till June 12, 2017) without any improvement. To overcome this agony, patient came to Netra roga OPD no 15 (ophthalmology) of Shalakya Tantra department at Ch. Brahm Prakash Ayurved Charak Sansthan on June 12, 2017. He took treatment for 2 months and got complete remission in his symptoms.
Purely Vata kapha shamaka treatment was planned for the patient based on pathophysiology of the particular disease. Brihat Vata chintamani rasa, ekangveer rasa with Dashamoola Kwatha were prescribed along with Brahmi Ghrita to facilitate penetration. With this hypothesis, management was initiated for above case.

**PAST HISTORY**

History of road traffic accident (RTA) almost a year back (March 2016) resulted in minor injury on right side above the eyebrow. The patient was asymptomatic after the injury and developed above-mentioned complaints in March 2017.

**EXAMINATION DETAILS**

Details of patient examination at different visits to the hospital are indicated in Table 1.

**TREATMENT GIVEN**

The treatment provided to the patient is detailed in Table 2.

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**Table 1: Examination of patient at different visits to the hospital**

<table>
<thead>
<tr>
<th></th>
<th>1st visit (Fig. 1)</th>
<th>After 15 days (Fig. 2)</th>
<th>After 2 months (Fig. 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Right eye</td>
<td>Left eye</td>
<td>Right eye</td>
</tr>
<tr>
<td>Examination</td>
<td>Complete isolated</td>
<td>Normal</td>
<td>Very slight movement</td>
</tr>
<tr>
<td>Deviation</td>
<td>oculomotor palsy</td>
<td>Normal</td>
<td>observed</td>
</tr>
<tr>
<td>Eye ball</td>
<td>Eye ball was turned</td>
<td>Central gaze</td>
<td>Eye ball was turned down, out and slightly intort</td>
</tr>
<tr>
<td>movement</td>
<td>down, out and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>slightly intort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ptosis</td>
<td>Complete (severe &gt;4</td>
<td>Absent</td>
<td>Eye ball slightly open (3 mm)</td>
</tr>
<tr>
<td>Pupil</td>
<td>mm)</td>
<td>Normal</td>
<td>Fixed and dilated</td>
</tr>
<tr>
<td>Direct consensual</td>
<td>Absent</td>
<td>Normal reaction</td>
<td>Absent</td>
</tr>
<tr>
<td>pupillary reaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crossed diplopia</td>
<td>Present (on manually raising the eyelids)</td>
<td>Absent</td>
<td>Present (on manually raising the eyelids)</td>
</tr>
</tbody>
</table>

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**Figs 1A and B: First visit**

**Figs 2A to C: After 15 days**
RESULTS

When the patient came in the OPD his condition looked like Asadhyavastha (incurable condition) but treatment was started after explaining prognosis to the patient. The only positive aspect was the age of the patient, as there was more chances of regeneration or healing of the damaged nerve in the young. In the second visit, i.e., after 15 days of the Ayurvedic treatment, patient was very enthusiastic and happy as he was able to slightly open his right eye. After 2 months, there was complete resolution of oculomotor nerve palsy, ptosis was resolved, patient was able to move his eye in all the eight cardinal directions, pupillary reflexes were normal and binocularity was maintained. Complaints of nausea, vomiting and headache were completely resolved.

DISCUSSION

All the causes of isolated oculomotor nerve palsy were not found in the patient except idiopathic. After analysis of the above said condition, the probable pathology

Table 2: Conservative treatment prescribed to the patient

<table>
<thead>
<tr>
<th>Drug</th>
<th>Ingredients</th>
<th>Method of preparation</th>
<th>Dose</th>
<th>Anupana</th>
<th>Duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brihat Vata chintamani rasa</td>
<td>Swarna Bhasma, Rajata Bhasma, Abhrak Bhasma, Lauha Bhasma, Praval Bhasma, Mukta Bhasma, Rasa sindura, Juice extract of Kumari</td>
<td>Fine powder of these ingredients is ground with the juice extract of Ghrita kumara made into paste and pills are prepared</td>
<td>125 mg 1 OD</td>
<td>Honey</td>
<td>2 months</td>
<td>Dhootapapeshwar pharmacy (bought by the patient)</td>
</tr>
<tr>
<td>Ekangveer rasa</td>
<td>Rasa Sindura, Sh Gandhaka, Kantalauha Bhasma, Vanga Bhasma, Tamra Bhasma, Abhrak Bhasma, Trinakanta Bhasma, Trikatu powder</td>
<td>Decoction of Triphala, Nirgundi, Trikatu, Chitraka, Shigru, Kushttha, Arka, Vishamusthi, Datura</td>
<td>125 mg 1 BD</td>
<td>Honey</td>
<td>2 months</td>
<td>Chaudhary Brahm Prakash Ayurved Charak Santhanh (CBPACS) hospital dispensary Indian Medicines Pharmaceutical Corporation limited</td>
</tr>
<tr>
<td>Brahmi Ghrita</td>
<td>Brahmi juice extract, Cow Ghrita, Trikatu, Vacha, Kushtha, Shankhpushpi</td>
<td>Juice extract of Brahmi is mixed with Ghrita and Kaika of other drugs and is cooked until only Ghrita is left in whole mixture. Now Ghrita is separated from the mixture</td>
<td>2 tea spoon full in morning with 3 hour fasting</td>
<td>Lukewarm Dashamoola Kwatha</td>
<td>5 months</td>
<td>CBPACS hospital Dispensary Indian Medicines Pharmaceutical Corporation limited</td>
</tr>
<tr>
<td>Dashamoola Kwatha</td>
<td>Bilva, Agnimanthia, Gambhari, Patala, Shyonaka, Brihati, Kantakari, Prishnaparni, Shalaparni, Gokshura</td>
<td>1 part drugs and 16 parts of water is boiled till it remains 1/4th</td>
<td>40 mL BD</td>
<td>–</td>
<td>5 months</td>
<td>CBPACS hospital Dispensary Indian Medicines Pharmaceutical Corporation limited</td>
</tr>
</tbody>
</table>
was categorized as Ekanga Vata dusti with Avarana of kapha of right eye. Therefore, Vata kapha hara treatment was planned for the patient. Whenever there is increase in sthira, Snigdha and guru guna of kapha, it leads to blockage of circulation, which results in poor nourishment to particular nerve, ultimately causing the palsy of that particular nerve. Brihat Vata chintamani, ekangveer rasa, and Dashamoola Kwatha are specifically given as Vata kapha hara treatment. Brahmi Ghrita was given to enhance drug availability in ocular tissue and to facilitate microcirculation. With this concept, treatment protocol was planned for the particular case.

OUTCOME AND FOLLOW-UP

Patient came to the OPD of CBPACS hospital with chief complaints of dropping of right eye lid, which got resolved completely with ocular movements in all eight directions and normal pupillary reactions. Slight diplopia in extreme gaze was developed, as complete coordinated binocular movements will take time to reestablish. After completion of 2 months treatment, patient was followed on every 15 days for 6 months. Brihat Vata chintamani rasa and ekangveer rasa were withdrawn after 2 months of treatment and Brahmi Ghrita and Dashamoola Kwatha were advised for further 4 months (Table 3).

CONCLUSION

Ayurvedic treatments definitely have a role in chronic diseases like different types of palsies, especially oculomotor nerve palsy. A case series or pilot study should be conducted in the similar cases to validate the above case report, which may prevent or treat many cases of oculomotor palsies. This case report can also be used to generate hypothesis for cases of strabismus from an Ayurvedic perspective.

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REFERENCES

हिंदी सारांश

'आजु अग्रवाल, करतार एस. दीमान, मनोज त्रिपाठी, कलिनी दीमान

terms:- व्यक्तिकरक मूल्यांकन द्वारा पृथक पृथक से पृथक oculomotor तंत्रिका प्रभावण में आयुर्विदिक उपचार की प्रभावकारिता का आकलन करता है।

तरीकः आयुर्विदिक उपचार द्वारा पूरक प्रभावित हल्लों में की सिपोट। एक व्यक्तिकरक मूल्यांकन का प्रयोग, परिणाम नेत्र आंदोलन और ptosis में सुधार के आधार पर रोगी के नज़ारे के अनुसार परिणामिक किया गया था। एक रोगी 33 साल दिल्ली के निजी करोबारी पुरुष निवासी कम आंदोलनों के साथ अपनी दाहिनी आंख खोलने में असमर्थ की शिकारी के साथ प्रस्तुत हुआ। वह दो और आज़ महीने पहले तक विलुप्त सामान्य था परन्तु अधानक उसे गलती शर दर्द (दाई तरफ) उल्टी एक सप्ताह के लिए फिल्सिट हुए। इन शिकारियों के साथ रोगी चीज़ों नीचे ब्रह्म प्रकाश आयुरविद चर्चा संस्थान के शालावन तंत्रिका विभाग के नेत्र विश्लेषण वाहिन 8-15 में आया था। उससे 2 महीने के लिए उपचार दिया और उसके लक्षणों में पूरा आराम दर्द किया गया।

निष्कर्ष:- आयुर्विदिक उपचार की विशेष रूप से तंत्रिका प्रभावण के विभिन्न प्रकार की सर पुरानी दीमान में मूल्यिका है। उपर्युक्त मामले की सिपोट की वैद्य मिश्रित करने हेतु वेंट रुखला या पायलट अध्ययन किया जाना चाहिए जो oculomotor तंत्रिका प्रभावण लेकर वह इलाज कर पाने में सक्षम हो।