AYURVEDIC MANAGEMENT OF DIABETIC OPHTHALMOPLEGIA: A CASE STUDY

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ABSTRACT
Diabetes mellitus (DM) is a widely prevalent non communicable disease in recent times. In India, 62 million people (12.1%) live with DM. DM has many complications like diabetic nephropathy, neuropathy, foot ulcer, retinopathy. Diabetic neuropathy occurs in ~50% of individuals with type 1 and type 2 DM of more than 10 years. Mononeuropathy (dysfunction of isolated cranial or peripheral nerves) is rare complication of DM and involvement of the third cranial nerve is most common. In Ayurveda DM is correlated to Prameha, which is Vata predominant stage. Diabetic ophthalmoplegia is understood as vatapradhana Prameha upadrava. Management of ophthalmoplegia must include Kaphamedohara, Vatahara, balya and Brihmana drugs.

Here a clinically diagnosed case of Diabetic ophthalmoplegia (6th nerve palsy) is treated with Ayurvedic treatments i.e; Nasya (Errhine therapy) with Ksheerabala taila 101 avartita, Sthanika Abhyanga (local oil massage) with Ksheerabala taila, ksheera dhooma (fumigation with milk) and other internal medications like Brihat Vata Chintamani, Astavarga Kashaya, dhanwantaram kashaya and Ksheerabala capsule. Total duration of treatment was 15 days. There was complete reduction in diplopia, headache, numbness of face and in restricted movement, marked improvement was seen in visual acuity (VA).

Keywords: Diabetic ophthalmoplegia, prameha upadrava, Nasya, Ksheeradhooma.
outward movement of eye is hampered. 6th nerve palsy patients usually present with binocular horizontal diplopia, worse in the distant and esotropia in primary gaze. Causes of 6th nerve palsy include trauma, aneurysm, ischemia, demyelination and idiopathic cause. Unicocular diplopia which can be debilitating and significantly impairs the everyday and professional activities of the patient.

In Ayurveda, Diabetic ophthalmoplegia is understood as Upadrava of Prameha. Swamy pujapada Mahamuni mentioned Mehal/prameha as a cause for Netravikara. Bahu abaddha medas and kapha in pramehi causes rasayani dourbalya and accumulation of kapha-medas in the walls of blood vessels obstruct the flow of rakta (dharmani dardhyata). Hence quantitative inflow of rakta through these narrow vessels leads to impairment of nerve and muscle function. Further it leads to dhatukshaya janya Vata vridhi. It hampers the action of muscles intern movements of eyeball. Chesta pravartana (initiation of movements) is the function of Vayu. Prana vayu is responsible for proper functioning of all the Indriyas and vyana vayu is responsible for all types of movements in body. Hence prana vayu, vyana vayu, kapha and medas are involved in the samprapti (pathogenesis) of Diabetic Ophthalmoplegia.

**MATERIALS AND METHOD:**

**CASE HISTORY:** A 30 years old male patient approached OPD of Shalakya tantra, SKAMCH, Bengaluru on 18/10/2019 with the complaints of double vision while seeing left side objects in the past 1 week. Associated with headache on left half, numbness in left temporal region and blurriness of vision for distant objects. Patient is a known case of Diabetes mellitus for 8 years and not on regular medication. Patient has the history of Facial palsy 6 months back and has been treated. On examination visual acuity (VA) in left eye was 6/24 and in RE 6/9(p). pupil was reactive and left eye lateral rectus muscle paresis was noticed i.e; left eyeball cannot be rotated towards lateral side. Eye lid-lid margin, Conjunctiva, cornea, sclera, anterior chamber, lens, fundus were normal in both eyes. Colour perception was normal. Intracranial pathology was ruled out with the help of CT scan. Based on clinical presentation, the patient was diagnosed as Diabetic ophthalmoplegia and advised to take following treatment.

Treatment given: Nasya (Errhine therapy) with ksheerabala taila 101 avaritri 8 drops for each nostril for 7 days, Sthanika Abhyanga (local oil massage) with ksheerabala taila for 7 days, ksheera dhooma (fumigation with milk) for 7 days and internally Brihat vata Chintamani (BVC) tablet 1Bd with water, ksheerabala capsule 1 Bd with water, Dhanwantaram and Astavarga Kashaya 2 tsf Bd with warm water for 15 days.

**OBSERVATION AND RESULTS:** After 7 days of treatment, marked improvement was seen in diplopia, eyeball movement, VA and relief from numbness around temporal region & headache was observed. At the end of 15 days all the symptoms were relieved with restoration of eyeball movements.
Table 1: showing visual acuity of patient before and after treatment

<table>
<thead>
<tr>
<th></th>
<th>Without glasses</th>
<th>With glasses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BT</td>
<td>AT1</td>
</tr>
<tr>
<td>Both Eyes</td>
<td>6/9(P)</td>
<td>6/9</td>
</tr>
<tr>
<td>Right Eye</td>
<td>6/6(P)</td>
<td>6/6(P)</td>
</tr>
<tr>
<td>Left Eye</td>
<td>6/24</td>
<td>6/12(P)</td>
</tr>
</tbody>
</table>

BT- before treatment, AT1-after 7 days of treatment, AT2- after 15 days.

DISCUSSION

Neuropathy of cranial nerves, despite being a rare entity in Diabetes mellitus, appears to be a serious problem from diagnostic and therapeutic point of view. Diabetic ophthalmoplegia can be understood as Pramehajanya Netravikara. As Kapha, medas, Prana and vyana vayu are involved doshas, Kapha medohara and vatanulomana treatments to be adopted. In this case, kapha medohara treatment is advised to correct Samprapti and Vatahara- brihmana treatment is given to restore and strengthen the muscle activity. Astavarga Kashaya contains Bala, sahachara, eranda, devadaru, shunti, nirgundi and lashuna, which are Vata-Kaphahara in nature. Dhanwantaram Kashaya contains Dashamoola, yava, kulatha, trijataka which are kaphavata and medohara. Both the kashayas does Kapha medohara and then by vatashamana. BVC tab. contains bhasmas (nanoparticles) of Swarna (gold), Rajata (silver), Loha (Iron), Abhraka, pravala, mukta which rejuvenates and helps to restore the functions of nerve and muscle. Ksheerabala capsules are Balya and Brahmana, gives strength to muscle.

Nasya (errhine therapy) helps to stimulate the higher centres of brain like amygdaloidal complex, hypothalamus, thalamus which inturn shows action on regulation of endocrine and nervous system functions. Sthanika abhyanga and Ksheeradhupa improves the local circulation, helps to alleviate numbness and left half sided headache & strain (vata...
vriddhi) with the restoration of normal functional integrity of vata. Throughout the treatment duration good glycemic control was maintained by the drugs in use by the patient.

CONCLUSION
Though Diabetic ophthalmoplegia is a rare entity, appears to be a serious problem for diagnosis and treatment. Diplopia is very annoying to the patient. Hence early intervention is required to give relief from symptoms and to treat the cause. Along with the Pramehahara medicines Sthanika abhyanga, Ksheeradhupa, Nasya and other internal medications like tab. BVC, cap.KB, Astavarga Kashaya, Dhanwantaram Kashaya are beneficial in Diabetic ophthalmoplegia.

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