AYURVEDIC MANAGEMENT OF DRY EYE - A CASE STUDY

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ABSTRACT

Introduction: Dry eye is caused by a chronic lack of sufficient lubrication and moisture on the surface of the eye. It is an ocular surface disease due to tear film instability. As per the International Dry Eye Workshop (DEWS) dry eye is defined as a “Multi factorial disease of the tears and ocular surface that results in symptoms of ocular discomfort, visual disturbance, and tear film instability with potential damage to the ocular surface. Shushkakshipaka is one among Sarvagata Netra Rogas- a disease affecting all parts of the eye can be symptomatically correlated with Dry eye. This is a single case study of Shushkakshipaka (Dry Eye) in which Ayurvedic treatment was done. Materials & Methods: A fully conscious, normal oriented female patient, aged 26 years, came to OPD of Shalakya Tantra, IPGT &RA, Jamnagar on 20-02-2018 with complaints of burning sensation, itching, feeling of dryness in both eyes since 2 months. She was diagnosed as a case of Dry Eye. Past history have no any relevant past history was found. She was treated with Deepana Pachana, Kosthashodhana, followed by three sittings of Nasya with Anu Taila and three sittings of Tarpana with Jivantyadi Ghrita and orally Snehapana with Jivantyadi Ghrita. Results: At the end of study, improvement in burning sensation, itching, feeling of dryness, schirmer’s test, tear film break up time, fluorescein staining in both eyes were found.

Keywords: Shushkakshipaka, Dry Eye, Ayurvedic Management, Nasya, Tarpana.

INTRODUCTION

Dry eye syndrome is one of the most common problems affecting the general population and can cause problems that range in severity from mildly irritating to debilitating. Dry eye syndrome is a general term that describes the state of the front of the eye, called the tear film. Normally, this layer of tears is stable that not only provides the cornea and conjunctiva a healthy buffer from damage where it constantly exposed to the air in the office workers, but this interface between the tear film and the air is also responsible for a significant amount of the focusing power of the eye. When the tear film becomes unhealthy, it breaks down in different places on the cornea and conjunctiva leading not only to symptoms of irritation, but also to unstable and intermittently changing vision. Other symptoms of dry eye include burning sensation, itching, tearing,
foreign body sensation, frequent blinking, redness, eye pain, eye fatigue, blurring of vision.\textsuperscript{1} The overall prevalence of dry eye in India, based on Ocular Surface Disease Index (OSDI) is 29.25%.\textsuperscript{2} No remedial measures for the prevention and cure of this pathology prevail in the domain of modern medicine except using ocular surface lubricants, computer glasses. Though lubricating drops can reduce the effects of Dry Eye, but its preservatives are harmful to eye. Dry Eye has no direct reference in Ayurveda classics. However, similar clinical manifestation can be observed in a disease called as Shushakshipaka. It is a Vata- Pitta Vyadhi having symptoms like Gharsha (foreign body sensation), Vishushkatwama (feeling of dryness in eyes) and Kricchronmeela-Nimeelanama (difficulty in opening the eyes).\textsuperscript{3}

In Ayurveda classics, specific treatment has been mentioned for Shushakshipaka such as Snehana (intake of Ghee), Tarpana (~retention of ghee over eyes), with Jivaniya Ghrita, Nasya (~Nasal medication) with Anu Taila and Pariseka (~ocular irrigation) with warm milk added with Saindhava.\textsuperscript{4}

MATERIALS AND METHOD: CASE HISTORY:
A fully conscious, normal oriented female patient, aged 26 years, came to OPD of Shalakya Tantra, IPGT & RA, Jamnagar on 20-02-2018 with chief complaints of Burning sensation, Itching, Feeling of dryness since 2 months in both eyes. She was diagnosed as a case of Dry Eye.

Clinical findings: She was afebrile. The pulse rate was 74/minute. Respiratory Rate was 16/minute and Blood Pressure was 110/70mmHg. Systemic examination was within normal limits.

Ocular examination: On torch light examination, cornea was clear in both eyes, anterior chamber was normal in both eyes; pupils were of normal size and normal in reaction. On slit lamp examination, both eyes show mild nasal interpalpebral conjunctival staining with fluorescein. IOP in both eyes was 14.6 mm Hg.

Visual examination: In both eyes distant visual acuity was 6/12. Best corrected visual acuity in both eyes was 6/6. Pin hole improvement in both eyes was 6/6.

Dashavidha pareeksha: She was Vatapitta Prakriti. Vikriti was found to be Vatapitta. She was in Yuvaavastha. Her Satwa, Sara, Samhanana, Aharashakti, Vyayamashakti, Pramana and Satmya were Madhyama.

Ashavidha pareeksha: Her Nadi, Mutra and Shabda were Sadharana. Mala was Abadha. Jihwa was Anupalepa. Sparsha was Anushnaseetha. Akrithi was Madhyama and Drik was Samanaya.

Sroto Pareeksha: Rasa, Rakta and Majja Vaha Srotas were involved.

Diagnostic assessment:
Schirmer- I test, Tear film break up time, Fluorescein staining, Rose Bengal staining was done before treatment to confirm the diagnosis of Dry Eye.

Table 1: Diagnostic Criteria

<table>
<thead>
<tr>
<th>Name of Test</th>
<th>Right Eye</th>
<th>Left Eye</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schirmer- I test</td>
<td>8 mm</td>
<td>9 mm</td>
</tr>
<tr>
<td>Tear film break up time</td>
<td>5 sec</td>
<td>6 sec</td>
</tr>
<tr>
<td>Fluorescein staining</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Rose Bengal staining</td>
<td>Negative</td>
<td>Negative</td>
</tr>
</tbody>
</table>

THERAPEUTIC INTERVENTION:
Deepana Pachana was done with Shivksara Pachana Churna.\textsuperscript{5} Six gm of the medicine was given with hot water twice daily for three days. Koshtashodhana was done with Avipattikara churna.\textsuperscript{6} Twenty gm of the medicine was given with hot water at six am in the morning. Nasya was done with Anutaila.\textsuperscript{7} Six drops of the Anutaila was instilled in both nostrils for the next seven days at nine am. Then Tarpana was done in both the eyes with Jivantyadi Ghrita\textsuperscript{8} for five days. After a gap of one week second sitting of Nasya and Tarpana was done. During this gap of seven days Jivantyadi Ghrita six gm was given orally at night. Total three sitting of Nasya and Tarpana was done.
Table 2: Treatment adopted:

<table>
<thead>
<tr>
<th>Treatment Given</th>
<th>Drug Name</th>
<th>Duration</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deepana Pachana</td>
<td>Shivksara Pachana Churna</td>
<td>3 days</td>
<td>6 gm</td>
</tr>
<tr>
<td>Kosthashodhana</td>
<td>Avipattikara Churna</td>
<td>1 day</td>
<td>20 gm</td>
</tr>
<tr>
<td>Nasya (3sitting)</td>
<td>Anultaila</td>
<td>7 days</td>
<td>6 drops each nostril</td>
</tr>
<tr>
<td>Tarpana (3sitting)</td>
<td>Jivantyadi Ghrita</td>
<td>5 days</td>
<td>30 gm</td>
</tr>
<tr>
<td>Shamana Snehana (3sitting)</td>
<td>Jivantyadi Ghrita</td>
<td>7 days</td>
<td>6 gm</td>
</tr>
</tbody>
</table>

RESULTS:
There was improvement in both signs & symptoms. Schirmer’s-I test, Tear film break up time and Fluorescein staining showed marked improvement. No adverse or unanticipated events were reported during the study.

Table 3: Improvement in diagnostic criteria

<table>
<thead>
<tr>
<th>DIAGNOSTIC CRITERIA</th>
<th>RIGHT EYE</th>
<th>LEFT EYE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schirmer- I test</td>
<td>8mm</td>
<td>18mm</td>
</tr>
<tr>
<td>Tear film break up time</td>
<td>5 sec</td>
<td>12 sec</td>
</tr>
<tr>
<td>Fluorescein staining</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Rose Bengal staining</td>
<td>Negative</td>
<td>Negative</td>
</tr>
</tbody>
</table>

DISCUSSION
The line of management in Shushkahshipaka includes Snehana, Nasya, Tarpana, and Seka. Prior to Snehana, Deepana Pachana is essential for proper assimilation of Sneha. Shivkshara Pachana Churna was used for this purpose. Prior to Nasya, Kayashodhana is mandatory and hence Kosthashodhana was done with Avipattikara Churna as the Prakriti and Vikriti was Vatapitta. Medicines for Snehapana, Nasya and Tarpana were selected as per the classical reference. Nasya was done with Anu Taila as it is indicated in Shushkahshipaka. Anu Taila is having Tridosahara properties. Nasa being the gateway to Shira, so the drug administered through nostrils reaches Shringatak (a Sira Marma by Nasa Srota), Spreads in the Murdha (brain) taking Marma of Netra (eye) scratches the morbid Doshas in supra clavicular region and expels them from Uttamanga. So, the effect of drug is Tridosahara, hence it breaks the pathology of Shushkahshipaka. Tarpana was done with Jivantyadi Ghrita as it is indicated in Shushkahshipaka. Considering the Doshakarma, Jivantyadi Ghrita appears to be predominantly Vata-Pitta Shamaka by virtue of its Snigdha Guna and Sheeta Virya. And it also gives the lubrication to the ocular surface and definitely helps to check the epithelial damage of conjunctiva and cornea. Shamana Snehapana was done with Jivantyadi Ghrita as Ghrita is Pitanalharam (Vata-Pitta Shamaka) so pacifying the Doshas (Vata-Pitta) involved in the Shushkahshipaka (Dry Eye). Hence it will break the pathology of Shushkahshipaka.

CONCLUSION
Thus, it can be concluded that Ayurvedic approach is helpful in the treatment of dry eye. Nasya and Tarpana with Shamana Snehpna showed significant results in sign & symptoms of dry eye. This study emphasizes on the importance of classical approach of Ayurveda in dry eye.

REFERENCES
1. https://eyewiki.aao.org> Dry_Eye_Syndrome Date- 25/3/2019 Time-12.20 pm

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Conflict Of Interest: None Declared