CLINICAL STUDIES ON DRY EYES IN EASTERN ODISHA
Tarun Kumar Panda1, Suchitra Kumari2

1Assistant Professor, Department of Ophthalmology, SCB Medical College and Hospital, Cuttack, Odisha.
2Associate Professor, Department of Biochemistry, AIIMS, Bhubaneswar, Odisha.

ABSTRACT

BACKGROUND
In this modern age of high dependence on electronic gadgets, pollution, there is an increasing tendency of eyes getting affected with Dry Eyes Syndrome. This is one of the common yet under-diagnosed eye problems in Odisha. Hence, this study was conducted with an objective to identify the clinico demographic profile and incidence of dry eyes in eastern Odisha.

MATERIALS AND METHODS
The patients were selected from Ophthalmology, Skin & VD, OBG, Paediatrics OPDs. Detailed history was taken; local and systemic examination were done along with specific emphasis on tear film characteristics. The parameters were assessed for different aetiologies of dry eye syndromes and compared to know the distribution of this condition.

RESULTS
Dry eyes were found more commonly in laborers and in patients suffering from Keratoconjunctivitis Sicca and vitamin A deficiency. There is a decrease in values of blink rate, tear film breakup time, tear meniscus height, Schirmer’s Test readings.

CONCLUSION
Dry eyes affect all the age groups depending upon the aetiology being involved. So, this condition still needs thorough evaluation and meticulous approach for proper diagnosis and reduced morbidity.

KEYWORDS
Clinical Study, Dry Eyes.

HOW TO CITE THIS ARTICLE: Panda TK, Kumari S. Clinical studies on dry eyes in Eastern Odisha. J. Evid. Based Med. Healthc. 2018; 5(37), 2687-2692. DOI: 10.18410/jebmh/2018/551

BACKGROUND
Dry eye conditions are one among the most frequently encountered eye disease. Dry eye is a non-infectious ocular surface disorder of tear film due to tear deficiency or excessive tear evaporation which causes damage to interpalpebral ocular surface and is associated with symptoms of ocular discomfort. This condition is often equated with Keratoconjunctivitis sicca but the later refer to qualitative and quantitative abnormality of lacrimal gland secretion. Dry eye is characterized by ocular irritative symptoms, tear film instability, tear hyperosmolarity and ocular surface disease. Tear film stability is maintained by composition factors (lipid, aqueous and mucin layers), hydrodynamic factors (corneal sensitivity, eye lid blinking and ocular surface epithelium). Homeostasis of tear film also involves delicate hormonal and neuronal regulatory mechanisms. Dry eye patients can have wide range of symptoms such as heaviness of lid, burning and F.B sensation, blur, fluctuating vision, headache, corneal desiccation, corneal ulcers and can even lead to blindness. Most of the work on tear film had been reported from western countries but there are few studies done in this part of our country. The exact incidence of this condition is difficult to assess because of varied presentation and associated iceberg presentation of this condition is due to inadequate knowledge of patients, low socioeconomic status. Presentation in elderly, immediate relief by antibiotics use and decrease referral. The present study is based on proper understanding of aetiopathogenesis of this condition, assessment of symptoms and signs, performing and evaluating specific diagnostic tests, routinely and systematically followed by management strategies. The points are selected from OPD, department of ophthalmology, Skin & VD, Gynec and Paediatric department. They were subjected to specific tests, compared with previous existing data followed by guidelines in new treatment modalities and keeping other associated systemic disease in mind. The basic goal expected were preservation of vision and relief of discomfort. The present study aims to identify the clinic demographic profile of this coast side of India.

Objectives
The present study aims to identify the clinic demographic profile and incidence of dry eyes in eastern Odisha during April 2015 to December 2017.
MATERIALS AND METHODS
All the participants were selected from patients attending OPD of ophthalmology, O&G, Paediatrics and Dermatology department of SCBMCH Cuttack, giving suggestive complaints. They were randomly chosen for study with fulfillment of diagnostic criteria. Those participants found associated with other irrelevant systemic disorders or were medicinal therapy were excluded from our study. The present study consists of 107 clinically diagnosed dry eye. Each case were carefully interrogated and after taking verbal concentration. Detailed history was taken under following headings with an interval of 10 to 15 minutes between each test to avoid biased results.

a) Personal details of patient.
b) Detail history of presentation and associated disorders.
c) General and systemic examination.
d) Local examination of eyes
e) Slit Lamp examination for further evaluation of ocular structure.
f) Blink rate.
g) Tear meniscus height.
h) Schirmer’s test.
i) Basal secretion test.
j) PH of tear film
k) Tear break up time invasive /Non-invasive.
l) 1% Rose Bengal staining.

Material Required for the Study
Corneal loupe, stop watch, slit Lamp, biomicroscope, sterile fluorescent strips, Whatman’s filter paper no 41, PH Litmus indicated paper, 1% Rose Bengal stain, Topical anaesthesia (4% lidocaine), a measuring scale in mm, Bausch and Lomb keratometer, glass slide.

Personal history was given to emphasis to keep age factor in consideration and so as to also assess the purchasing power. Detailed drug history was taken to differentiate between unstable tear film and delayed tear clearance. Systemic examination was done to assess any associated skin lesions or disorders. Slit lamp biomicroscopy was done to assess the lid, lacrimal puncta, eye lashes, lacrimal saccs for regurgitation7 conjunctiva for Bitot’s spots in particular and cornea for any alterations in curvature and smoothness of surface8 anterior chamber for any reaction and sclera for any nodules.

Tear meniscus height was measured as a parameter for tear deficiency.9 Schirmer’s test was done to measure basal and reflex secretion.10 Basal secretion test was done by using topical anaesthesia. PH of tear film was known by Litmus paper. Tear break up time was recorded by Keratometer,11 Rose Bengal 1% staining was done to examine debris and dead cells. Case card dry eyes (baseline proforma) was maintained as record for anticipation.

RESULTS AND DISCUSSION

The incidence study (Table-1) shows that 130 patients were registered in department of ophthalmology SCBMCH, Cuttack from April 2015 to December 2017 out of which 120 cases were from Ophthalmology department, 6 cases from skin and V.D Dept. 2 from O & G Department, 2 from Paediatrics department. The incidence of dry eyes with respect to other ocular disease in our hospital is 0.20659.12 The low incidence in our hospital could be due to limited knowledge about this entity and low socio-economic status. 23 of these patients did not turn up for follow up, hence 107 patients were taken for study.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>KCS</th>
<th>V.A.D.</th>
<th>SJS &amp; Others</th>
<th>A.C. &amp; B</th>
<th>CO &amp; CL Users</th>
<th>AHI</th>
<th>S.A.</th>
<th>No. of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>0</td>
<td>21</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>23.36</td>
</tr>
<tr>
<td>11-20</td>
<td>0</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>17.75</td>
</tr>
<tr>
<td>21-30</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>12.14</td>
</tr>
<tr>
<td>31-40</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>10.26</td>
</tr>
<tr>
<td>41-50</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>9.34</td>
</tr>
<tr>
<td>&gt;51</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>29</td>
<td>27.10</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Age Incidence

Dry eye affection in elderly is common due to KCS but in children and young adults, this condition is prone due to Vit-A deficiency, malnutrition and Steven Johnson syndrome (Table-2). Dry eye is very common disorder affecting a significant percentage of population, specifically those older than 50 years. Dry eye in elderly is with a multitude of contributing factors and a wide spectrum of severity. In our series, the percentage of dry eye syndrome patients over 40 yrs. of age is 36.4%. This could be due to decreased lacrimal gland and decreased immunity with ageing and hormonal imbalance among post-menopausal women.13
Sex | KCS | V.A.D. | SJS & Others | Allergic Conjunctivitis & Blepharitis | Computer & Contact Lens Users & Refractive Error | Autoimmune | Systemic Association | No. of Patients | Percentage (%)
---|---|---|---|---|---|---|---|---|---
Male | 6 | 15 | 8 | 5 | 4 | 4 | 6 | 45 | 42
Female | 19 | 16 | 7 | 8 | 3 | 7 | 2 | 62 | 58
Total | 25 | 31 | 15 | 13 | 7 | 11 | 5 | 107 | 100

**Table 3. Sex Wise Distribution**

The incidents of dry eye is more in female than male but no statistical significant difference of gender affection had been found in our study.

Profession | No. of Patients | Percentage (%)
---|---|---
Labourers | 22 | 20.56
Rickshaw pullers | 10 | 9.34
Vehicle drivers | 8 | 7.47
Farmers | 16 | 14.94
Fisherman | 7 | 6.54
Computer Users | 14 | 13.08
Students | 7 | 6.54
Teachers | 3 | 2.80
Doctors | 1 | 0.93
Engineers | 2 | 1.86
Cooks (House wife employers) | 7 | 6.54
Others | 10 | 9.34

**Table 4. Professional Incidence of Dry Eyes**

Table 4 shows that there is an appreciable preponderance of dry eye conditions in lower socioeconomic status. This increased incidence (63 cases) may be due to chronic exposure of workers to dust, wind and dry environment causing increased evaporation and ignorance of this condition. It was also observed that majority of patients presented their episodes of attack during month of April to June maybe due to dry environment. Decreased incidence in educated class was due to their increased awareness and deceased exposures to outside atmosphere.14

<table>
<thead>
<tr>
<th>BCVA</th>
<th>Refractive Error</th>
<th>Type of Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;6/18</td>
<td>Myopia (28)</td>
<td>Glasses (14) Contact lens (4)</td>
</tr>
<tr>
<td></td>
<td>Hyperope (21)</td>
<td>Glasses (10) Contact lens(4)</td>
</tr>
<tr>
<td>&lt;6/18</td>
<td>Myopes (32)</td>
<td>Glasses (17) Contact lens (10)</td>
</tr>
<tr>
<td></td>
<td>Hyperope (26)</td>
<td>Glasses (20) Prisms (2) Telescopic glass (1)</td>
</tr>
</tbody>
</table>

**Table 5. Type of Refractive Error in Dry Eyes**

There was no significant correlation (Table-5) found existing between type of refractive error and dry eye state. Some patients presented diminished vision due to associated lid margin disorders which hardly needed glasses.

<table>
<thead>
<tr>
<th>Aetiology</th>
<th>No. of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCS</td>
<td>25</td>
<td>23.36</td>
</tr>
<tr>
<td>V.A.D</td>
<td>31</td>
<td>28.97</td>
</tr>
<tr>
<td>SJS</td>
<td>15</td>
<td>14.01</td>
</tr>
<tr>
<td>Allergy conj. &amp; Blepharitis</td>
<td>13</td>
<td>12.14</td>
</tr>
<tr>
<td>Computer, CL users, RE</td>
<td>7</td>
<td>6.54</td>
</tr>
<tr>
<td>Ageing</td>
<td>5</td>
<td>4.67</td>
</tr>
<tr>
<td>Hormonal Imbalance</td>
<td>6</td>
<td>5.60</td>
</tr>
<tr>
<td>Associate with systemic disease</td>
<td>5</td>
<td>4.67</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 6. Clinical Varieties of Dry Eyes**

The above table (Table-6) shows that majority of patients suffering from dry eyes were due to KCS and vitamin A deficiency; systemic disease association with dry eyes were found to be minimal.
The study of symptoms and lifestyle associated with dry eye (Table 7) revealed that ocular fatigue is the commonest presentation followed by dry sensation (50%) blurred vision (55%). Patients with KCS (SS type) most commonly present with ocular fatigue.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>KCS</th>
<th>V.A.D.</th>
<th>SJS and Others</th>
<th>Allergic Conj. &amp; Blepharitis</th>
<th>Co &amp; CL Users &amp; R.E.</th>
<th>A HI</th>
<th>Syst. Association</th>
<th>No. of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Sensation</td>
<td>8</td>
<td>6</td>
<td>15</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>5</td>
<td>54</td>
<td>50.46</td>
</tr>
<tr>
<td>Itching</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>33</td>
<td>30.84</td>
</tr>
<tr>
<td>Gritting Sensation</td>
<td>16</td>
<td>12</td>
<td>0</td>
<td>8</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>53</td>
<td>49.43</td>
</tr>
<tr>
<td>Reddening</td>
<td>8</td>
<td>0</td>
<td>15</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>48</td>
<td>44.85</td>
</tr>
<tr>
<td>Burning Sensation</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>24</td>
<td>22.43</td>
</tr>
<tr>
<td>Ocular pain and fatigue</td>
<td>25</td>
<td>4</td>
<td>15</td>
<td>0</td>
<td>4</td>
<td>11</td>
<td>5</td>
<td>64</td>
<td>59.81</td>
</tr>
<tr>
<td>Discharge</td>
<td>6</td>
<td>0</td>
<td>15</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>29</td>
<td>27.10</td>
</tr>
<tr>
<td>Stickiness</td>
<td>14</td>
<td>4</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>49</td>
<td>45.79</td>
</tr>
<tr>
<td>Blurred vision</td>
<td>16</td>
<td>12</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>49</td>
<td>45.80</td>
</tr>
<tr>
<td>Bleeding from eye</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>14.01</td>
</tr>
<tr>
<td>Erythematous Rash</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>14.01</td>
</tr>
</tbody>
</table>

**Table 7. Incidence of Symptomatic Presentation**

Table 8 shows that maximum number of dry eye patients have blink rate between 11-15 followed by blink rate of more than 15 per minute.

<table>
<thead>
<tr>
<th>Blink Rate Per Min</th>
<th>KCS</th>
<th>V.A.D.</th>
<th>SJS and Others</th>
<th>A.C &amp; B</th>
<th>CO &amp; CL Users R.E.</th>
<th>A HI</th>
<th>Syst. Association</th>
<th>No. of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>10.28</td>
</tr>
<tr>
<td>6-10</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>22</td>
<td>20.54</td>
</tr>
<tr>
<td>11-15</td>
<td>13</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>40</td>
<td>37.39</td>
</tr>
<tr>
<td>&gt;15</td>
<td>4</td>
<td>19</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>34</td>
<td>31.77</td>
</tr>
</tbody>
</table>

**Table 8. Blink Rate**

Table 9 shows that maximum of dry eye patients due to KCS and vitamin A deficiency aetiology had decreased tear film break up time. All Steven Johnson syndrome patients showed TBUT value between 0-5 secs.

<table>
<thead>
<tr>
<th>TBUT (Secs)</th>
<th>K.CS</th>
<th>V.A.D.</th>
<th>SJS and Others</th>
<th>A.C &amp; B</th>
<th>Co &amp; CL Users R.E.</th>
<th>A HI</th>
<th>Syst. Association</th>
<th>No. of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>2</td>
<td>2</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>17.75</td>
</tr>
<tr>
<td>6-10</td>
<td>17</td>
<td>25</td>
<td>0</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>3</td>
<td>66</td>
<td>61.68</td>
</tr>
<tr>
<td>&gt;10</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>22</td>
<td>20.57</td>
</tr>
</tbody>
</table>

**Table 9. Tear Film Break Up Time (TBUT)**

Table 10 shows that maximum number of patients had TMH between 0.5-0.6 i.e. in subnormal range. TMH of 0 value were found only in Steven Johnson syndrome patients. There was no correlation between tear meniscus height and Schirmer’s test.

<table>
<thead>
<tr>
<th>TMH (mm)</th>
<th>K.CS</th>
<th>V.A.D.</th>
<th>SJS and Others</th>
<th>A.C &amp; B</th>
<th>Co &amp; CL Users R.E.</th>
<th>A HI</th>
<th>Syst. Association</th>
<th>No. of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>8.41</td>
</tr>
<tr>
<td>0.1-0.2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>10.28</td>
</tr>
<tr>
<td>0.3-0.4</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>27</td>
<td>25.23</td>
</tr>
<tr>
<td>0.5-0.6</td>
<td>13</td>
<td>19</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>44</td>
<td>41.12</td>
</tr>
<tr>
<td>0.6</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>14.95</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>107</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 10. Tear Meniscus Height**
CONCLUSION

Dry eyes are commonly seen in elderly due to KCS but young ones are more prone to dry eyes because of vitamin A deficiency, malnutrition and SJS. The percentage of dry eye syndrome over 40 years of age is 36%; It is little more in females. Dry eyes are found to affect predominantly the workers who are exposed quite often to dust, wind, heat. It also has association with alcohol intake and use of cosmetics.

The incidence of dry eyes is relatively high during months of summer and there is hardly any correlation between refractive error and dry eyes. Dry eyes are multifactorial in origin and most of them had varied presentation. Blink rate steadily declines with advancing age; women in post-menopausal period are affected due to hormonal imbalance. Though under diagnosed, this condition can be best evaluated clinically assessing the functional status of tear film. Precipitating factors should be taken care of immediately. Health education too is essential. Though resources are limited, we should boost ourselves to tackle it from grass root level.

REFERENCES


**Table 11. Schirmer’s Test**

<table>
<thead>
<tr>
<th>RBS Score</th>
<th>K.CS</th>
<th>V.A.D</th>
<th>SJS and Others</th>
<th>A.C &amp; B</th>
<th>Co &amp; CL Users R.E.</th>
<th>A HI</th>
<th>Syst. Association</th>
<th>No. of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>2</td>
<td>2</td>
<td>13</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>17.75</td>
</tr>
<tr>
<td>6-10</td>
<td>6</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>30</td>
<td>28.03</td>
</tr>
<tr>
<td>30</td>
<td>11</td>
<td>13</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>42</td>
<td>39.25</td>
</tr>
<tr>
<td>&gt;15</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>14.97</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107</strong></td>
<td><strong>100</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11 shows that majority of patients showed subnormal Schirmer’s test value (11-15 mm) without topical anaesthesia. But with its use maximum cases showed Schirmer test value between 6-10 mm indicating that the use of local anaesthesia had lowered the values by 45% as a result of suppressing the reflex tearing.15 Schirmer’s test value of less than 5 mm in 5 minutes was seen in KCS patients, elderly and also by use of local anaesthesia.

**Table 12. Rose Bengal Staining**

<table>
<thead>
<tr>
<th>RBS Score</th>
<th>K.CS</th>
<th>V.A.D</th>
<th>SJS and Others</th>
<th>A.C &amp; B</th>
<th>Co &amp; CL Users R.E.</th>
<th>A HI</th>
<th>Syst. Association</th>
<th>No. of Patients</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-0</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>27</td>
<td>25.24</td>
</tr>
<tr>
<td>1-3</td>
<td>11</td>
<td>13</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>41</td>
<td>38.32</td>
</tr>
<tr>
<td>4-6</td>
<td>8</td>
<td>10</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>22</td>
<td>20.56</td>
</tr>
<tr>
<td>7-9</td>
<td>0</td>
<td>2</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>15.88</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107</strong></td>
<td><strong>100</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Majority of our dry eye patients showed RBS score between 1-3. KCS and vitamin A deficiency patients contributed to the majority (Table-12): only SJS patients had RBS score as 0. RBS score between 7-9 was found only in vitamin A deficiency and SJS patients.


