Comparison of the performance of high Dk Soft Lens performance on a 6 and 30 night Extended Wear schedule

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PURPOSE
To compare the performance of high Dk silicone hydrogel contact lenses worn on a 6 night (6N) or 30 night (30N) extended wear (EW) schedule.

MATERIALS AND METHODS
- 22 month prospective clinical trial.
- 161 patients.

Table 1: Patient characteristics and lens wear schedule

<table>
<thead>
<tr>
<th>Variable</th>
<th>6N</th>
<th>30N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females Male</td>
<td>59</td>
<td>102</td>
</tr>
<tr>
<td>Age (yrs) (mean ± SD, range)</td>
<td>35±8</td>
<td>31±5</td>
</tr>
<tr>
<td>Limbal hyperemia (worst case, 0-4)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Bulbar hyperemia (worst case, 0-4)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Microcysts (number)</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Corneal staining (worst case, 0-4)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Front surface deposits (0-4)</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Back surface deposits (0-4)</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Wettability (0-5)</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Mucin balls (number)</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>% of subjects conforming to wear schedules</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

Physiological Performance

Figure 1: Limbal redness
Figure 2: Bulbar redness
Figure 3: Microcysts
Figure 4: Corneal staining (extent)

Lens Performance

Figure 5: Front surface deposits
Figure 6: Back surface deposits
Figure 7: Wettability
Figure 8: Mucin balls

Symptomatology

Figure 9: Overall comfort
Figure 10: End of day comfort
Figure 11: Overall vision
Figure 12: % of subjects conforming to wear schedules

RESULTS

Patient satisfaction was extremely high as was lens performance.

CONCLUSIONS

With high Dk SCL EW, the physiological response and lens performance were excellent.

No significant differences (p < 0.05) were found between the 6N and 30N wear groups for the variables assessed, with the exception of overall vision.

Patient satisfaction was extremely high as was compliance with wear schedule for both groups.

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