Plaque Removal

in vivo study

Comparison of plaque removal by Sonicare FlexCare and Rota-dent® One Step


Objective

To compare the plaque removal efficacy of the Sonicare FlexCare and Rota-dent One Step toothbrushes.

Methodology

Thirty-two healthy subjects, aged 21-60 years, participated in a single-blind, randomized, crossover-design study to assess the plaque removal efficacy and safety of the Sonicare FlexCare (ProResults brush head) and Rota-dent One Step (hollow brush head) power toothbrushes. Each toothbrush was used for one week at home for familiarization. At the end of each period, subjects presented with 24 hours plaque. Plaque was assessed using the Turesky-Modified Quigley-Hein Plaque Index before and after a two-minute supervised brushing session with the assigned toothbrush. Safety was assessed in oral soft tissue examinations prior to all assessments of plaque.

Results

Sonicare FlexCare removed significantly more plaque than Rota-dent One Step from the dentition overall (p<0.0001) as well as in hard-to-reach areas, i.e., the posterior teeth (p<0.0001) and the interproximal spaces (p<0.0001). Both toothbrushes were safe to use.

Conclusion

Sonicare FlexCare was found to remove significantly more plaque than Rota-dent One Step when assessed over the entire dentition (overall) as well as in hard-to-reach areas.

- % of Plaque Reduction

<table>
<thead>
<tr>
<th></th>
<th>Sonicare FlexCare</th>
<th>Rota-dent®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>45%</td>
<td>30%</td>
</tr>
<tr>
<td>Posterior</td>
<td>39%</td>
<td>29%</td>
</tr>
<tr>
<td>Interproximal</td>
<td>42%</td>
<td>24%</td>
</tr>
</tbody>
</table>

(p<0.0001)