Determining antibacterial effect of Bluem oxygen fluid for endodontic purposes: in vivo

Results:

- The result suggest that Bluem oxygen fluid is more effectively than 5.25% NaOCl and almost as effective as Chlorhexidine.

<table>
<thead>
<tr>
<th></th>
<th>5 min. after the sample</th>
<th>24 h. after the sample</th>
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<tbody>
<tr>
<td></td>
<td>NaOCL 5.25%</td>
<td>CHX 2%</td>
</tr>
<tr>
<td>No growth</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Growth</td>
<td>7</td>
<td>2</td>
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</tbody>
</table>
Biofilm penetration

- Oxygen molecules (O2) can penetrate much deeper into the biofilm to kill the anaerobic bacteria than the Chlorhexidine (C22H30Cl2N10) molecule.
- Oxygen molecule (O2) can penetrate much deeper into the perimucosal seal around the implant.
• Qualification based on oxygen release measured in 1-100 mg/l O2.

I. Bluem Professional Line (medical device)*
- Oxygen release > 20 mg/l O2
  - Professional implant care gel (15 ml.)
  - Professional oxygen fluid (500 ml.)

II. Bluem Consumer Line (with bluem honey oxygen technology) Oxygen release < 20 mg/l O2
- Toothpaste (75 ml., 15 ml.)
- Mouthwash (5000 ml., 500 ml., 50 ml)
- Mouth spray (15 ml.)

* Currently the Bluem Professional line is sold as cosmetics.