endOclear
Cleaner airways, fewer vent days™

Superior Technology for Effective Cleaning of Endotracheal Tubes

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>#I2-EC-100-0110</td>
<td>endOclear with Collection Y</td>
<td>10/Box</td>
</tr>
<tr>
<td>#I2-BCA-210</td>
<td>endOclear Collection Adapter Cassette</td>
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</table>

endOclear Offers…

- Better Outcomes
- Cleaner Airways
- Reduced Biofilm Build-up
- Reduced Incidence of Infection
- Reduced ICU Ventilator Days
- Reduced ICU Length of Stay
- Reduced Patient Work-of-Breathing

Mercury Medical
Your Need... Our Innovation

www.mercurymed.com
Superior Technology for Cleaning ETT’s

- Rounded Tip: Designed not to dislodge secretions
  - Tip expands to clear ETT’s, Sizes 7 - 9

- Patented Wiper Blade: Removes what suctioning leaves behind (thick secretions, bacteria and clots)

- Convenient Collection Adapter: Removes Biofilm/Secretions from the patient airway and out of the ICU

- Collection Adapter: Maintains closed circuit during secretion removal

Closed Suction does not remove residual biofilm and secretions from the wall of ET tubes.

**Your Need . . .**

- Improved Patient Safety
- Better Outcomes
- Reduced Total Health Care Costs

“In Summary, our study supports the idea of a dynamic relationship between airway colonization, biofilm, and VAP deployment. The idea of bacterial survival on ETT biofilm as a pathogenic mechanism for microbial persistence and impaired response to antibiotic therapy highlights the importance of discovering new strategies focused in the removal of biofilm from the ETT.”


**Our Innovation . . .**

**endOclear® removes biofilm and secretions that Closed Suction leave behind. endOclear is clinically validated in reducing . . .**

- Length of intubations
- Length of ICU Hospital Stays
- Risk of Infection
- Total Health Care Costs
**ETT Biofilm after suctioning only**

**Before endOClear**

![Image of biofilm before cleaning](image1)

**Figure 1**
Bioluminescence from pseudomonas bacteria within biofilm in an ET TUBE.

**After endOclear, Biofilm Removed**

![Image of biofilm after cleaning](image2)

**Figure 2**
Near absence of bioluminescence after one cleaning with the endOclear device.

![Image of biofilm with secretions](image3)

**Figure 3**
Amount of biofilm and secretions removed from the ET Tube in Figure 1.

The device has a unique wiper action and the capacity to return the ETT function to essentially nominal or normal with one application.


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**Results:**

**Effect on Airway Resistance**

![Graph showing effect on airway resistance](graph)

- Median Airway Resistance (cm H₂O/Lps)

<table>
<thead>
<tr>
<th></th>
<th>Median Airway Resistance (cm H₂O/Lps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>30</td>
</tr>
<tr>
<td>After</td>
<td>15</td>
</tr>
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</table>

**p < 0.001**

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**Conclusions:**

- Addition of a unique mucus shaving and tube cleaning system (endOclear®) to routine suctioning prior to an SBT significantly reduces both peak airway pressure and airway resistance.
- Our findings provide a physiologic rationale to explain the impact of this system on duration of MV noted in other reports.

The impact of a unique Airway Clearance System on Airway Mechanics in Ventilated Patients


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**endOclear® cost & quality metrics**

(Schofield PhD et. al. CHEST, NOV. 2013)

<table>
<thead>
<tr>
<th>Year</th>
<th># of cases</th>
<th>Ave. vent days</th>
<th>Ave. vent day Reduction</th>
<th>Ave. ICU LOS</th>
<th>Ave. ICU LOS reduction</th>
<th>Ave. &quot;direct cost&quot; reduction</th>
<th>Total cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>583</td>
<td>4.3</td>
<td>N/A</td>
<td>5.2 days</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>(No endOclear used)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>endOclear use with SBT</td>
<td>662</td>
<td>3.2</td>
<td>1.1 days</td>
<td>3.7 days</td>
<td>1.5 days</td>
<td>$3,212</td>
<td>$1,383,580</td>
</tr>
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