GuttaCore®

Travel challenging canals with confidence
The cold truth about gaps and voids

You need your gutta-percha to go the distance — in every case. Yet cold lateral techniques can leave voids in intricate areas. And warm vertical techniques can fail to warm the all-important last 3-5 mm of the master cone.

The technique: Cold Lateral
Where it stops short: Void-Free Fills

Obturated with cold lateral technique as seen before retreatment.

Gaps between cold gutta-percha cones can harbor harmful bacteria.

Photos courtesy of Dr. William Nudema and Dr. Ben Johnson

Voids are clearly visible between the compacted gutta-percha cones.

What your radiograph is missing

The technique: Single Cone
Where it stops short: Multiple Apices

A single cold gutta-percha cone doesn’t reach all points of exit.

Micro CT Scans:
Acta Novea Stellar Micro CTSi Di System, 2008 Slices,
9 micron slice thickness, KV 120

Small void.

Note the multiple voids that remain with the single cone system. No monobloc is created in the ML canal.

Single cone: large voids.

Single cone: note another void and empty fin.
GuttaCore®

Cold gutta-percha cone convenience, warm fill confidence

GuttaCore® obturators feature a crosslinked gutta-percha core that sends the surrounding warm, flowable gutta-percha three-dimensionally to follow the natural canal anatomy.

- An efficient technique that offers the ease of a single insertion, so your patients spend less time in your chair.
- The flowability of warm gutta-percha to achieve a complete fill throughout the canal system.
- The confidence of knowing GuttaCore® travels where traditional cold gutta-percha stops short.
The hydraulics advantage

Many obturation techniques use lateral or vertical compaction of gutta-percha. However, the hydraulic force from these techniques generally moves gutta-percha in one or two unequal directions (laterally or apically). GuttaCore® is different. Its crosslinked gutta-percha core centrally compacts the gutta-percha with a hydraulic force that sends it flowing equally in three dimensions – throughout the entire canal system. It removes easily, too.

GuttaCore® performance, case after case

The ability of GuttaCore® to follow the natural canal anatomy lets you obturate even challenging cases with confidence.
**GuttaCore® fills the entire canal anatomy**

Scientific studies show the effectiveness of GuttaCore® compared to other techniques in achieving a complete fill throughout the canal system. GuttaCore® delivers the highest gutta-percha content with fewer apical and coronal voids than cold lateral techniques.¹

1. Quality of obturation achieved by an endodontic core-carrier system with crosslinked gutta-percha carrier in single-rooted canals.; Li GH et al., J Dent. 2014, 42(9): 1124–1134

**GuttaCore® adapts better to intricate canal anatomy²**

To achieve apical adaptation of the master cone, warm vertical techniques must be 3-5 mm from the working length.³ Yet thermal penetration of the gutta-percha was limited — with significant thermal effect rarely exhibited more than 4-6 mm into the material.²


³. Analysis of continuous-wave obturation using a single-cone and hybrid technique.; Guess GM et al., JOE. 2003, 29(8):509-12

**Comparison of the amount of voids and gaps along the length of the canal left by other obturation techniques versus GuttaCore® (right).²**

Images courtesy of Dr. Franklin R. Tay

**Easy removal. Easy post space creation.**

<table>
<thead>
<tr>
<th>Method</th>
<th>Time for reaching working length (s)</th>
<th>Mean retreatment time in seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm Vertical</td>
<td>20.0</td>
<td>Significant difference between GuttaCore® group and the other groups (P &lt; .05).</td>
</tr>
<tr>
<td>Thermafil® Plus</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
<td>GuttaCore®</td>
<td>40.0</td>
<td></td>
</tr>
</tbody>
</table>

1. Note the abundance of voids in this cold lateral SEM cross-section.
2. The interface gap in this warm vertical SEM cross-section is a flap of PVA material extruding from the specimen surface.
3. The SEM cross-section of a canal filled with GuttaCore® shows a complete fill with all gutta-percha.
4. Images courtesy of Dr. Franklin R. Tay

**Images courtesy of Dr. Franklin R. Tay**
Confidence to the end

Whether you perform one root canal treatment per month or one per hour, it’s all about having confidence in your technique. GuttaCore® gives you that confidence with its warm gutta-percha that you send flowing three-dimensionally throughout the entire canal system with the ease of a single insertion. Create a better obturation experience compared to cold lateral or warm vertical techniques for you and your patients with GuttaCore®.

A complete clean for a complete fill

To ensure GuttaCore® is free to flow into intricate canal anatomies, remove debris and smear layer with irrigating solutions activated with the EndoActivator® System. Activation of full strength sodium hypochlorite (NaOCl) using irrigation activating technology killed more bacteria and dissolved more tissues than non-activated irrigation.4

Before activation

Not all debris is removed after instrumentation alone. Prior to using the EndoActivator® System, the instrumented canals appear clean, but do not reveal the whole story.

After activation

Successful obturation requires removing the barriers to a three-dimensional fill. Note the additional debris removed in the same instrumented tooth after using the EndoActivator® System.

## GuttaCore® Obturators

**Blister of 6x Obturators**
- Small: BNSGCWG500SML
- Primary: BNSGCWG500PRI
- Medium: BNSGCWG500MED
- Large: BNSGCWG500LRG

**Box of 30 Obturators (5 Blisters)**
- Small: BNSGCWGC00SML
- Primary: BNSGCWGC00PRI
- Medium: BNSGCWGC00MED
- Large: BNSGCWGC00LRG

## GuttaCore® for WaveOne® Gold Obturators

**Blister of 5x Obturators**

**Box of 25 Obturators (5 Blisters)**
- Small: BNSGCWG500SML
- Primary: BNSGCWG500PRI
- Medium: BNSGCWG500MED
- Large: BNSGCWG500LRG

## GuttaCore® for WaveOne® Gold Size Verifiers

**Blister of 6x Size Verifiers**

## Thermaprep® 2 Oven for GuttaCore®

**EU 230V**
- A017623000200

**UK 230V**
- A017623000233

**115V**
- A017611500200

## EndoActivator® System Kit

- Handpiece: A091100000000
- Tips: 75
- Barriers: 100