

A person in a red kayak is navigating through a narrow, dark rock passage. The sun is shining brightly from the opening of the passage, creating a strong backlight effect and illuminating the water. The rocks are dark and rugged, with some vegetation on top. The sky is blue with some clouds.

+
**WE
KNOW
ENDO.**

MAILLEFER

GuttaCore®

Travel challenging canals
with confidence

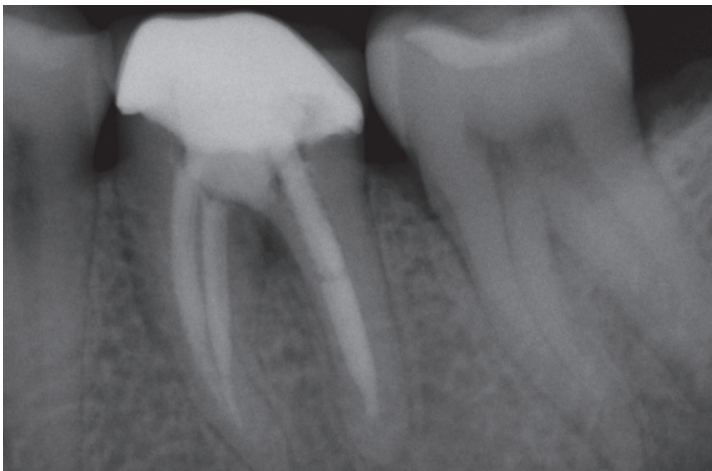
 **Dentsply
Sirona**
Endodontics

The cold truth about gaps and voids

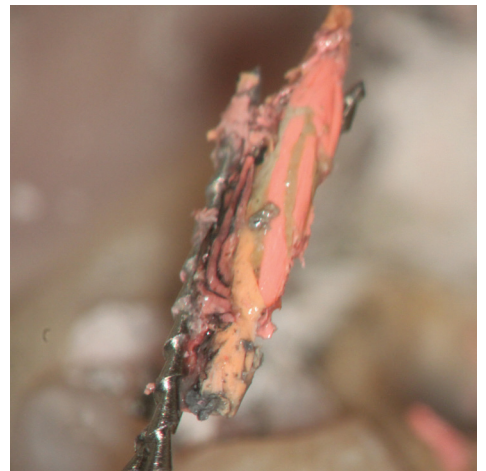
You need your gutta-percha to go the distance — in every case. Yet cold lateral techniques can leave voids in intricate areas. And warm vertical techniques can fail to warm the all-important last 3-5 mm of the master cone.

The technique: *Cold Lateral*

Where it stops short: *Void-Free Fills*



Obtured with cold lateral technique as seen before retreatment.



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

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



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

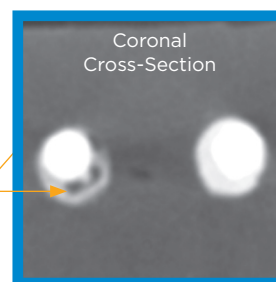
What your radiograph is missing

The technique: *Single Cone*

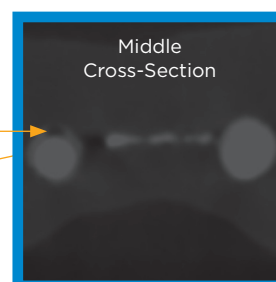
Where it stops short: *Multiple Apices*



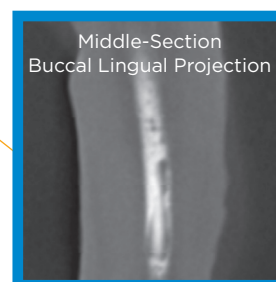
A single cold gutta-percha cone doesn't reach all points of exit.



Single cone: large voids.



Single cone: note another void and empty fin.



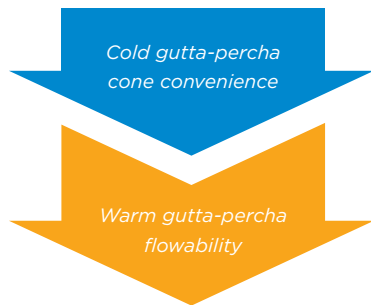
Note the multiple voids that remain with the single cone system. No monobloc is created in the ML canal.

Micro CT Scans:

*Actis 150/30, Desktop Micro CT/DR System, 2000 Slices,
9 microns slice thickness, KV 120.*

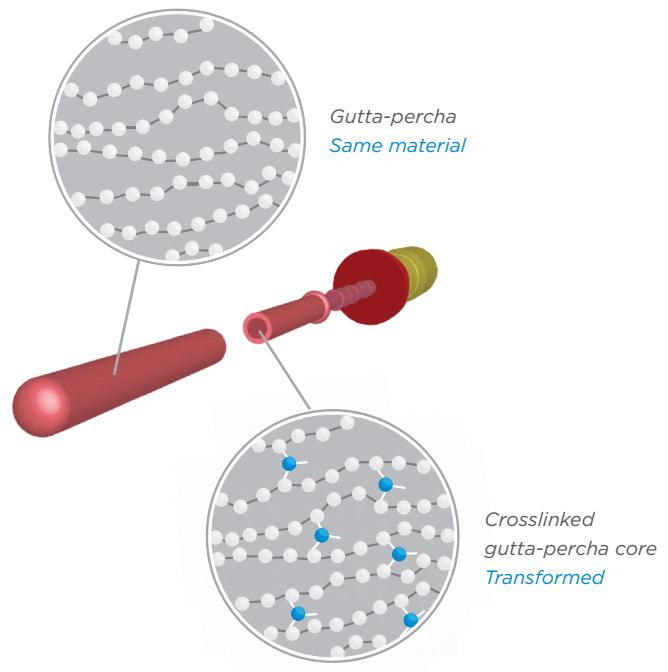


Cold gutta-percha cone convenience, warm fill confidence



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.



Micro CT scan reveals the true canal complexity of the root canal system.

Flows into the canal shape of this confluent root canal system.

Fills isthmuses, lateral and accessory canals.

Delivers warm gutta-percha beyond challenging curves and into the apex.

GuttaCore® performance, case after case

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



"GuttaCore® flowed into the lateral canal space, an area that cold gutta-percha would have missed."

Dr. Brian McCormack, Stony Brook, NY



"I know gutta-percha is flowing everywhere it needs to, down to the apical third. This case included three portals of exit."

Dr. Shawn Velez, Aiken, SC



"How could a single cone of gutta-percha fill so many portals of exit? This is why I feel more confident using GuttaCore®."

Dr. Bhairavi Parekh, Waterford, MI

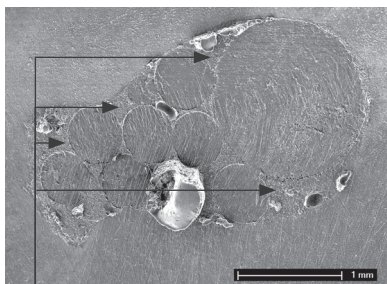


"Even around curves, you can see how GuttaCore® fills all the areas of the apical anatomy."

Dr. Munir Battikhi, Minneapolis, MN

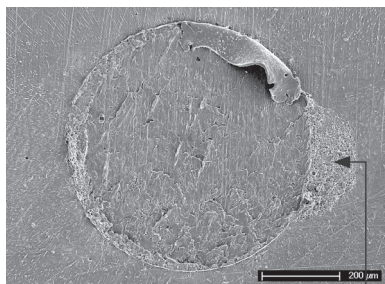
GuttaCore® fills the entire canal anatomy

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



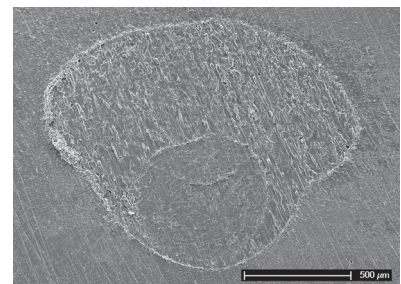
Note the abundance of voids in this cold lateral SEM cross-section.

Gutta-percha gap



The interfacial gap in this warm vertical SEM cross-section is a flap of PVA material extruding from the specimen surface.

Gutta-percha gap

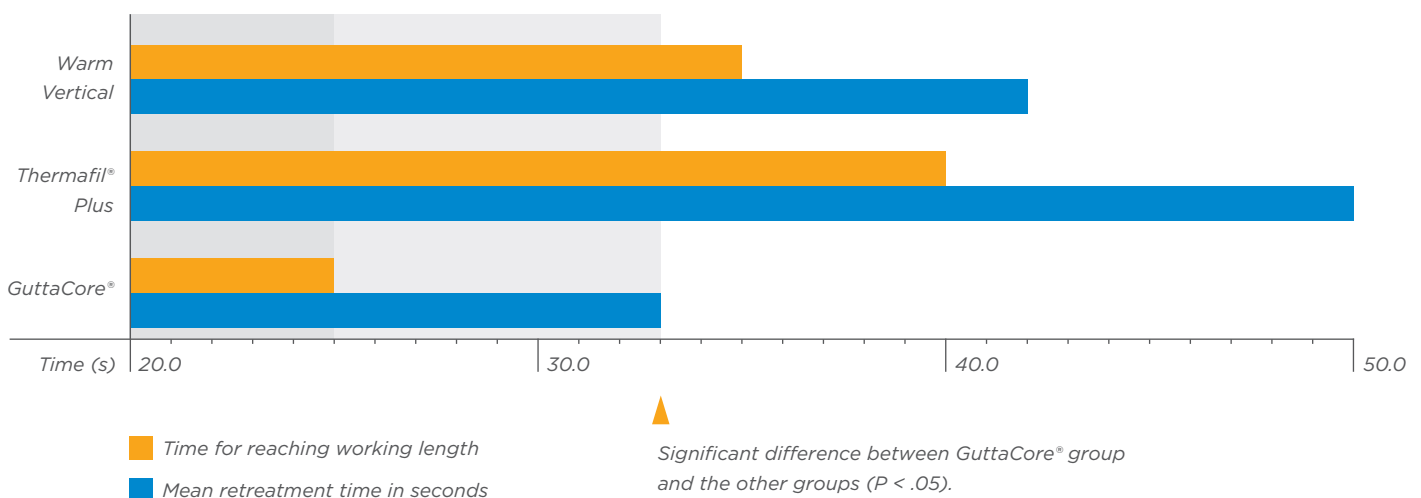


The SEM cross-section of a canal filled with GuttaCore® shows a complete fill.

All gutta-percha

Images courtesy of Dr. Franklin R. Tay

Easy removal. Easy post space creation.



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

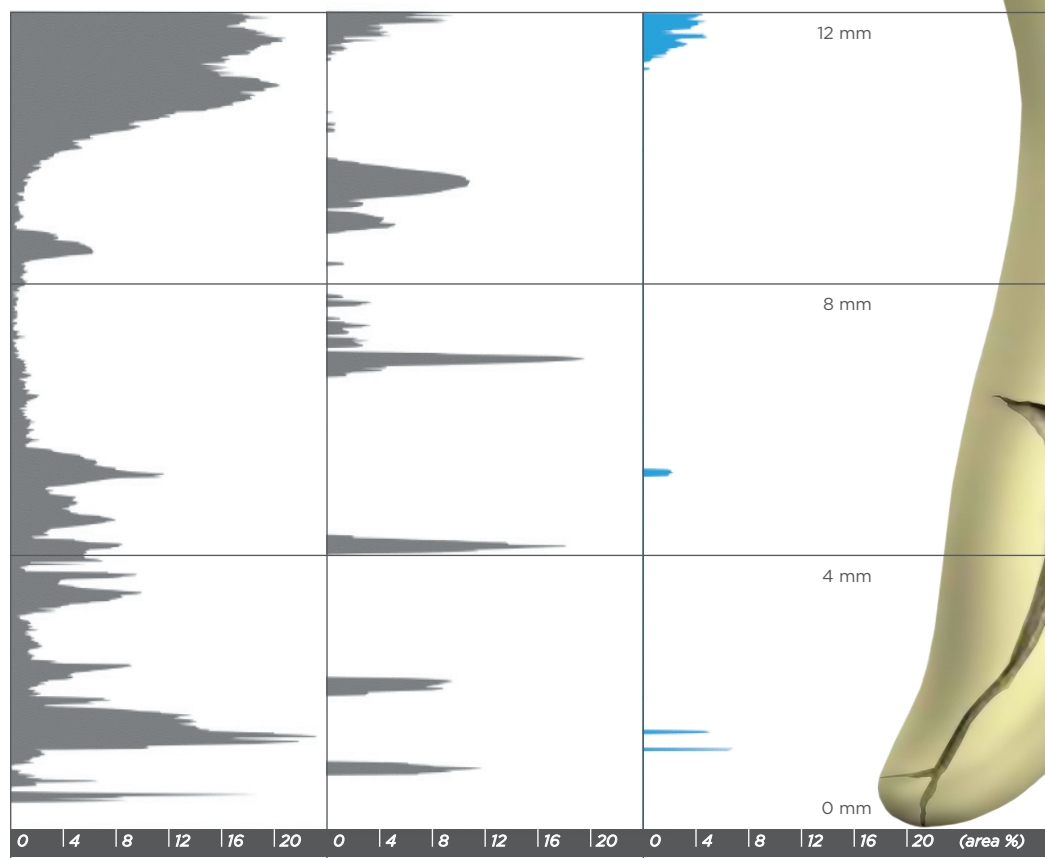
To achieve apical adaptation of the master cone, warm vertical techniques must be 3-5 mm from the working length.³ Yet thermal penetration of the gutta-percha was limited — with significant thermal effect rarely exhibited more than 4-6 mm into the material.²

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

Cold Lateral Compaction
(representative example)

Warm Vertical Compaction
(representative example)

GuttaCore® Obturator
(representative example)



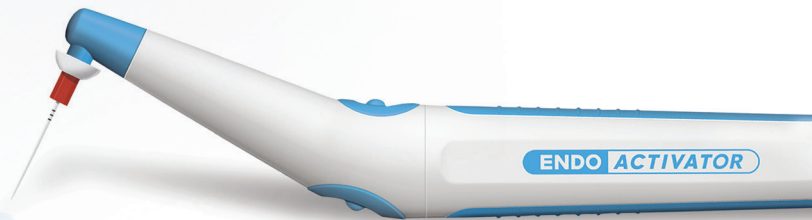
² Effect of varying the depth of heat application on the adaptability of gutta-percha during warm vertical compaction.; Smith RS, et al. JOE. 2000, 26(11):668-72
³ Analysis of continuous-wave obturation using a single-cone and hybrid technique.; Guess GM et al., JOE. 2003, 29(8):509-12

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

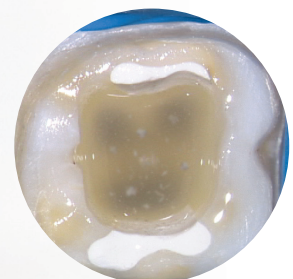
Before activation

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.



4. Effectiveness of different final irrigant activation protocols on smear layer removal in curved canals.; Caron G, Machtou P; J Endod. 2010

Product references

GuttaCore® Obturators



Blisters of 6x Obturators

| | |
|----|---------------|
| 20 | A1703B0042000 |
| 25 | A1703B0042500 |
| 30 | A1703B0043000 |
| 35 | A1703B0043500 |
| 40 | A1703B0044000 |
| 45 | A1703B0044500 |
| 50 | A1703B0045000 |
| 55 | A1703B0045500 |
| 60 | A1703B0046000 |
| 70 | A1703B0047000 |
| 80 | A1703B0048000 |
| 90 | A1703B0049000 |

Box of 30 Obturators (5 Blisters)

| | |
|----|---------------|
| 20 | A1703P0042000 |
| 25 | A1703P0042500 |
| 30 | A1703P0043000 |
| 35 | A1703P0043500 |
| 40 | A1703P0044000 |
| 90 | A1703B0049000 |

GuttaCore® for WaveOne® Gold Obturators



Blisters of 5x Obturators*

| | |
|---------|---------------|
| Small | BNSGCWG500SML |
| Primary | BNSGCWG500PRI |
| Medium | BNSGCWG500MED |
| Large | BNSGCWG500LRG |

Box of 25 Obturators (5 Blisters)

| | |
|---------|---------------|
| Small | BNSGCWGC00SML |
| Primary | BNSGCWGC00PRI |
| Medium | BNSGCWGC00MED |
| Large | BNSGCWGC00LRG |

GuttaCore® for WaveOne® Gold Size Verifiers



Blister of 6x Size Verifiers

| | |
|---------|---------------|
| Small | BNSGCWG625SML |
| Primary | BNSGCWG625PRI |
| Medium | BNSGCWG625MED |
| Large | BNSGCWG625LRG |

GuttaCore® for ProTaper Next® Obturators



Blister of 6x Obturators

| | |
|----|---------------|
| X2 | A1803B0042500 |
| X3 | A1803B0043000 |
| X4 | A1803B0044000 |
| X5 | A1803B0045000 |

Box of 30 Obturators (5 Blisters)

| | |
|----|---------------|
| X2 | A1803P0042500 |
| X3 | A1803P0043000 |
| X4 | A1803P0044000 |

Thermaprep® 2 Oven for GuttaCore®**



| | |
|---------|---------------|
| EU 230V | A017623000200 |
| UK 230V | A017623000233 |
| 115V | A017611500200 |

EndoActivator® System Kit



EndoActivator® System Kit

A091100000000
1 Handpiece
75 Tips
100 Protective Barriers

* Includes one size verifier per blister.

** In addition to the GuttaCore®, GuttaCore® for ProTaper Next® and GuttaCore® for WaveOne® Gold obturators, Thermaprep® 2 works with the Thermafil®, Thermafil® for ProTaper Gold and Thermafil® for WaveOne® Gold obturators. The additional faceplate stickers are included in all versions in order to allow adaption of the oven to the chosen system.