

DéPlaque

**Guide Right™ Surgical Guide System**  
*fabricate • evaluate • correct • verify • place*

In-office 3D Surgical Guides for Placing Short Implants

Start With Precision. Place With Confidence.™

1.800.314.0065 • [www.deplaque.com](http://www.deplaque.com)

---

---

---

---

---

---

---

---

---

---

Application of In-office Guide Right™ Surgical Guide System  
 for Accurately Placing Short Implants

**Presenter**  
 Sean W. Meitner DDS MS  
 Clinical Associate Professor, Department of Periodontology, the Eastman Institute for Oral Health,  
 Rochester, NY USA  
 Periodontal and Implant Practice, Pittsford, New York USA  
 Research / Development DePlaque-Guide Right, Victor, NY

**Presenter**  
 James L. Soltys DDS  
 Clinical Associate Professor, Department of Prosthodontics, the Eastman Institute for Oral Health,  
 Rochester, NY USA  
 Practice Limited to Prosthodontics, Victor, NY USA

**Moderator**  
 Max J. Cohen DDS  
 Clinical Instructor, Oral Rehabilitation, Georgia Regents University, College of Dental Medicine,  
 Augusta, Georgia USA; General Dentistry Practice, Dunbury, Georgia USA

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

---

---

Part 1

In-office 3D Surgical Guides for Placing Short Implants

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

---

---

**Is There a Need for Short Implants?**  
speaker discussion

**Need for Guided Implant Surgery for Short Implants**  
fully guided vs partially guided surgery

**Introduction to Guide Right™ Surgical Guide System**  
description of guide components: purpose & use

**Case Examples**  
use of the Guide Right™ guide system:  
fabrication, evaluation, correction & placement using surgical guide for short implants

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

**Is There a Need for Short Implants?**

speaker discussion

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

**What is the long term success rates of shorter implants?**

Stefano Sivellia, Et Al, Splinted and Unsplinted Short Implants in Mandibles, A Retrospective Evaluation With 5 to16 Years of Follow-up. Journal of Periodontology, April 2013; Vol 84 # 84.

- 109 patients with 280 implants
- 7 or 8.5 mm long X 3.75 or 4 mm diameter
- Smooth surface or rough surface in the mandible.
- Exclusion from the study of patients were those who:
  - smoked more than10 cigarettes a day
  - had history of radiation treatment,
  - had leucocyte disorders,
  - uncontrolled diabetes,
  - severe clenching,
  - bone grafts or localized GBR prior to implant placement

**SURVIVAL RATE OVER 16 YEARS**  
Machined surface implants ▶ 94%  
Rough surface implants ▶ 96%

**CONCLUSIONS**  
Different implant lengths, diameters & surface treatments did not appear to influence the prognosis of the implant.

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

### Study to compare the preservation of marginal bone when using 4 mm diameter implants 6 mm with 11 mm implant length

Zadeh H, Palmer R, Wenstrom J, Guje F, Chen S, Stanford C, Lindhe J

- A randomized Controlled study comparing 6 to 11 mm implants loaded 6 to 7 weeks after placement.
- Marginal bone level alterations were compared 6 and 12 months after implant placement.

at the time the abstract was presented

- 89 implants were followed for 6 months
- 54 implants were followed for 12 months at the time the abstract was presented

Conclusive evidence indicates that treatment with short implants had no negative effect on maintaining marginal bone levels when compared to standard length implants.

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

---

---

### Rise in injury to inferior alveolar nerve

Unfortunately the placement of dental implants has led to the rise in incidences of iatrogenic injury to the inferior alveolar nerve or its mental branch leading to temporarily or permanently altered sensation for the patient and may lead to the liability claim against the practitioner.

A recent study from Tel-Aviv, Israel Givol et al J Perio, April 2013

- 92 cases of nerve injury were examined
  - 76% were related to surgical procedures: with information based on Peri-apical or Panorex X-rays
  - 24% were related to operators based on CT scans

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

---

---

### Current Use of and need for Guided Surgery

“Only 2-3% of implants being placed used surgical guides.”

Scott Gantz, DDS, personal communication

Several studies have shown that placement of implants with CT-based drill guides is more accurate than with freehand drilling. Yet CT-based guides are used in only 10% of cases.

Benedict / Haber Wellesley Hills, MA; Barriers to Adoption of CT-Based Surgical Guides;

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

---

---

### Guided Surgery Why is it not used?

- Requires additional prep time
- Not familiar with guides available
- Challenges with surgical guides available

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

### Challenges with Current 3D Surgical Guides

- Most require off-site fabrication
- Cost. Usual time delay of several days to a week
- May result in difficulty fitting the patient when placed at the time of surgery
- Too restrictive: partially vs fully guided surgery

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

### Why use short implants?

- The more complex the procedure the higher the risk of complications.
  - sinus elevation
  - vertical ridge augmentation
  - nerve damage
- Human factors (less stress, fatigue, risk for complications, grafting , etc.) during the surgical procedure.

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

## Best Practices for Short Implant Success

- Implants should be placed within the envelope of available bone to increase clinical success.
- Pre-surgical 3D radiographs facilitate evaluation of the proposed angle of the long axis of the guide sleeve and proposed implant placement in two Planes.
- 3D Radiographs allow us to determine if planned implant placement conflicts with the adjacent roots, the maxillary sinuses, nerves, and if it is within the envelope of available bone.
- Surface area of short implants increases with the square of the radius.
  - Wider implants have greater surface area

Guide Right™ by DePloque

---

---

---

---

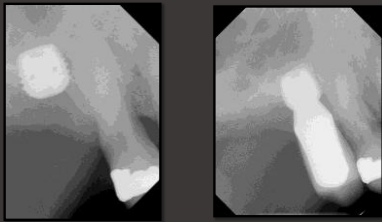
---

---

---

---

## Restoration of Short Implants



Guide Right™ by DePloque

---

---

---

---

---

---

---

---

## Need for Guided Implant Surgery for Short Implants

fully guided  
vs  
partially guided surgery

Guide Right™ by DePloque

---

---

---

---

---

---

---

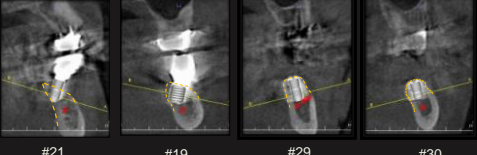
---

DéPlaque

### Guide Right™ Surgical Guide System

Comparison with • without guide used in implant placement planning

implants placed WITHOUT a guide      implants placed WITH a guide



#21      #19      #29      #30

Start With Precision. Place With Confidence.™

---

---

---

---

---

---

---

---

### Introduction to Guide Right™ Surgical Guide System

A Geometric approach to guided implant placement

description of guide components, purpose & use

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

### Guide Right™ Surgical Guide System

### A System of Components

for the fabrication & correction of diagnostic & surgical guides in three dimensions

- In-office or lab fabrication
- Evaluate with 3D imaging
- Allows linear and angular correction
- Enables precision implant placement
- Cost effective

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

**Basic Fabrication & Correction**  
of  
**DIAGNOSTIC & SURGICAL Guides**

Featuring

- GUIDE RIGHT COMPONENTS**  
standard, magnetic, 2-piece guide posts,  
cylindrical & open guide sleeves
- GUIDE POST BENDING TOOL**  
angular correction  
linear correction + offset guide posts
- FABRICATION with Triad gel**  
DIAGNOSTIC guide  
SURGICAL guide
- CONE BEAM X-RAY software**  
Required to evaluate & correct

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

**Guide Right™ COMPONENTS**  
used in  
**Fabrication of DIAGNOSTIC & SURGICAL Guides**

- Guide Posts: standard · magnetic offset · 2-piece
- Guide Sleeves: cylindrical · open
- Pilot Drills
- Pin-vice
- Guide Post Bending Tool

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

**Standard Guide Posts**  
for fabricating diagnostic guide

Straight



Straight Guide Post  
18 mm x 9 mm x 3/32 in.

Straight Guide Post  
30 mm x 2.9 mm x 3/32 in.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---


### Magnetic Guide Posts

**Straight**

- 3.0 mm od

**Offset**

- 3.0 od X 0.5 mm os
- 3.0 od X 1.0 mm os
- 3.0 od X 1.5 mm os
- 3.0 od X 2.0 mm os
- 3.0 od X 2.5 mm os
- 3.0 od X 3.0 mm os



For use with Open Guide Sleeves

Guide Right™ by DePaque

---

---

---

---

---

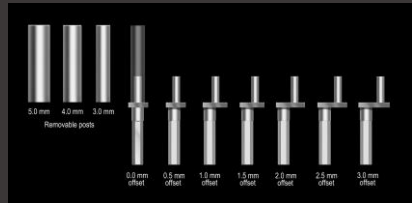
---

---

---

### 2-Piece Guide Post

used with (3-5 mm) cylindrical guide sleeves



5.0 mm 4.0 mm 3.0 mm  
Removable posts

0.5 mm offset 0.5 mm offset 1.0 mm offset 1.5 mm offset 2.0 mm offset 2.5 mm offset 3.0 mm offset

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

### Cylindrical Guide Sleeves



Anterior  
Straight Cut 3.0 mm x 8 mm

Posterior  
Angle Cut 3.0 mm x 8 mm

Large Diameter  
4.5 mm id x 5.0 mm

Large Diameter  
5.3 mm id x 5.0 mm

Guide Right™ by DePaque

---

---

---

---

---

---


---

---



Magnetic Guide Post • Open Guide Sleeve • Pilot Drills

- 4.0 mm Open Guide Sleeve (short)
- 4.0 mm x 10 Magnetic Guide Posts
- 4.0 mm x 1 mm Offset Magnetic Guide Post
- 2.0 mm x 5.0 mm Pilot Drill
- 2.0 mm x 10.0 mm Pilot Drill



Guide Right™ by DePlaque

---

---

---

---

---

---

---

---

Drills  
used with straight hand piece

5/64" drill



3/32"



Guide Right™ by DePlaque

---

---

---

---

---


---

---

---

Pin vice

Used to carefully enlarge the 5/64" hole to 3/32" by hand.  
If the hole is oversized it will compromise accuracy of the guide.



Guide Right™ by DePlaque

---

---

---

---

---

---

---

---

**Correctable Magnetic Offset Guide Post**  
used with open guide sleeves

3.0 X 0.5 mm offset (up to 5 mm offset)

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

**2-Piece Guide Post**  
Correctable Lower Piece with Upper Removable Piece

The bottom half of all Lower Pieces of the 2-Piece Guide Post are designed with 4 flat sides corresponding with the mesial, distal, buccal & lingual surfaces of the tooth. The flat surface allows holding the guide post in the bending tool for accurate corrections. In bucco-lingual, mesio-distal or both planes.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

**2-Piece Guide Post**  
Offset Lower Piece

0.5 mm offset    1.0 mm offset    1.5 mm offset    2.0 mm offset    2.5 mm offset    3.0 mm offset

The Offset Lower Piece is designed with a series of offset shapes to allow corrections in 0.5 mm intervals in any direction to change the linear position of the surgical guide sleeve.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

**2-Piece Guide Post**

Upper Removable Piece available in many diameters  
starting from 1.3 mm for mini implants / drills up to 6 mm diameter

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

**Guide Right™**  
Guide Post Bending Tool

- A straight 3 mm magnetic guide post is placed in the block of the bending tool.
- The 3 mm stylus is placed over the post.
- Pressure is applied to point of stylus moving it to the 9° correction indicated according to the protractor reading.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

**Guide Right™**  
GUIDE POST BENDING TOOL

**SINGLE BEND review**

- Step 1 Place bending tool plate on a secure flat surface with the degree increments at the top & the stainless steel bar with the v-cut at the bottom.
- Step 2 Locate 3/32" hole in the center of the v-cut and place the bottom half of the guide post into the hole. Tighten the set screw.
- Step 3 Locate the hole in the bottom of the stylus that you will use that will fit over the top half of the guide post (3.0 mm, 4.0 mm or 5.0 mm).
- Step 4 Fit the stylus over the guide post securely with the point directed at zero degrees and the bottom of the stylus in contact with the V block.
- Step 5 Using the stylus as a lever, bend the guide post to the degree of angle of correction. You may need to ease the point of the stylus beyond the point of the desired degree.
- Step 6 Loosen screw and remove guide post and the stylus to find the guide post bent to the desired angle.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

**Guide Right™**  
BENDING TOOL

**COMPOUND BEND overview**

Step 1 Position a straight or offset guide post in the bending plate, tightening the set screw against one of the flat surfaces on the lower half of the guide post.

Step 2 The 1<sup>st</sup> bend can be made to the right or left direction.

Step 3 The set screw is loosened and the guide post is rotated 90 ° next flat surface.

Step 4 The 2<sup>nd</sup> bend in the second plane is made after rotating the guide post up away from the surface of the bending plate to register the stylus point back at 0 degrees.

Step 5 Slide the stylus support bar down under the stylus until it supports the stylus. Tighten the side screws before making the second bend.

Step 6 The second bend can be made in either direction according to the x-ray.

Step 7 Remove the stylus and place the guide post back in the cast with the appropriate side indicated by a mark facing the buccal or lingual surface.

*Be sure the post is in the correct position.*

If the post needs to be corrected by a linear movement an offset guide post can be used.  
Off sets available in the 3 mm guide post: 0.5,1,1.5, 2.0, or 3.0 mm.

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

---

---

**Case Examples**

Use of the Guide Right™ guide system:  
fabrication, evaluation, correction & placement  
using surgical guide for short implants

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

---

---

**Placing Short Implants with  
Guide Right™ 3D Surgical Guides**

fabrication, evaluation, correction , verification  
& surgical guide placement

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

---

---

---

---

Case 1

Short Implant  
site # 3

- Fabrication DIAGNOSTIC guide
- Evaluate using invivo5 software
- No correction necessary
- Fabricate SURGICAL guide
  - 5 x 6 mm implant
  - 5.2 mm upper piece guide post
  - 5.3 mm cylindrical guide sleeve

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

Single Implant Case #3  
featuring 5 X 6 mm implant

2-Piece Guide Post • **Invivo** Evaluation



Diagnostic Guide



Surgical Guide

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

DéPlaque

Guide Right™ Surgical Guide System

- fabricate diagnostic guide
- evaluate
- correct
- re-fabricate surgical guide
- verify
- place

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

DéPlaque

### Guide Right™ Surgical Guide System

- fabricate diagnostic guide
- **evaluate**
- correct
- re-fabricate surgical guide
- verify
- place

---

---

---

---

---

---

---

### Creating a Guide Right™ Surgical Guide

Use of **Invivo5** Software  
to  
Evaluate, Correct, & Verify  
Prosthetically planned implant trajectory  
prior to drilling the osteotomy

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

# 3 "Home Position" of virtual planned implant position

The image shows four different views of a dental implant: 'axial' (top left), 'cross section' (top right), 'tangential' (bottom left), and 'volumetric' (bottom right). The 'volumetric' view includes the 'Invivo5' logo and 'anatomical reference' and 'implant position' labels. The 'axial' view shows a circular cross-section with a green line indicating the implant's axis. The 'cross section' view shows a longitudinal section of the implant. The 'tangential' view shows the implant from a side perspective. The 'volumetric' view shows the implant within a 3D model of the jawbone.

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

# 3 Axial view

The line indicating the plane of the cross sectional view should be rotated to position at 90° tangential to the curvature of the arch of the alveolar bone in the Axial view

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

# 3 Cross Section view

Angular Correction

- not needed

Implant

- 5 X 6 mm

Invivo

Guide Right™ by DePloque

---

---

---

---

---

---

---

---

# 3 Tangential view

Angle Correction

- not needed

Linear Correction

- 0.5 mm offset mesial

Invivo

Guide Right™ by DePloque

---

---

---

---

---

---

---

---



DéPlaque

**Guide Right™ Surgical Guide System**

- fabricate [diagnostic guide]
- evaluate
- correct
- **re-fabricate** [surgical guide]
- verify
- place

---

---

---

---

---

---

---



---

---

---

---

---

---

---

DéPlaque

**Guide Right™ Surgical Guide System**

- fabricate [diagnostic guide]
- evaluate
- correct
- re-fabricate [surgical guide]
- **verify**
- place

---

---

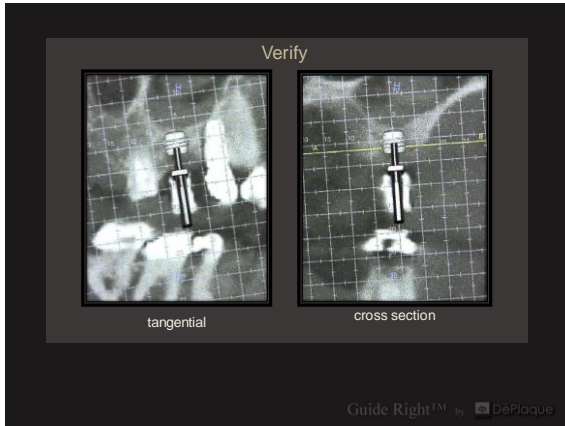
---

---

---

---

---



---

---

---

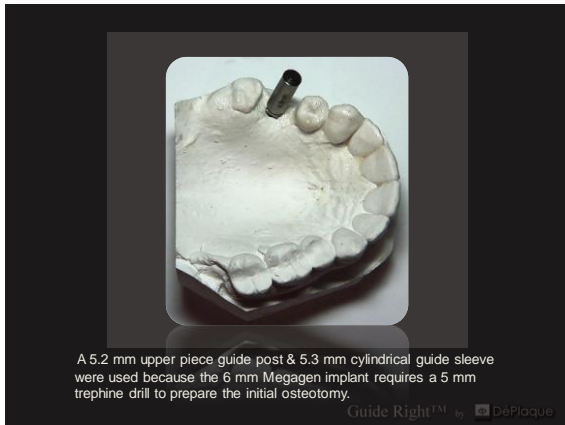
---

---

---

---

---



---

---

---

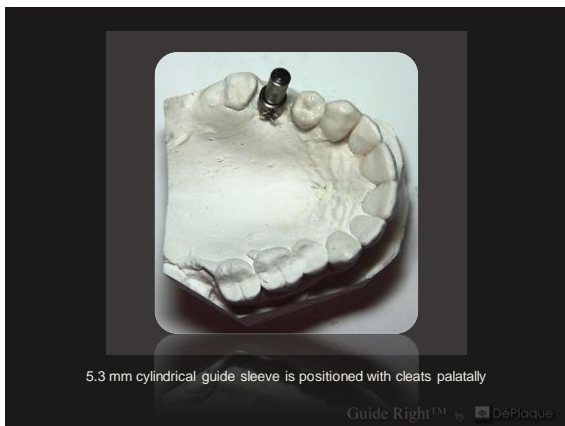
---

---

---

---

---



---

---

---

---

---

---

---

---



Triad® gel is added to the lubricated cast to form the SURGICAL guide

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



Occlusal view of SURGICAL guide with upper piece 5.3 mm guide post removed

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



SURGICAL guide with 5.3 mm guide sleeve

Guide Right™ by DePaque

---

---

---

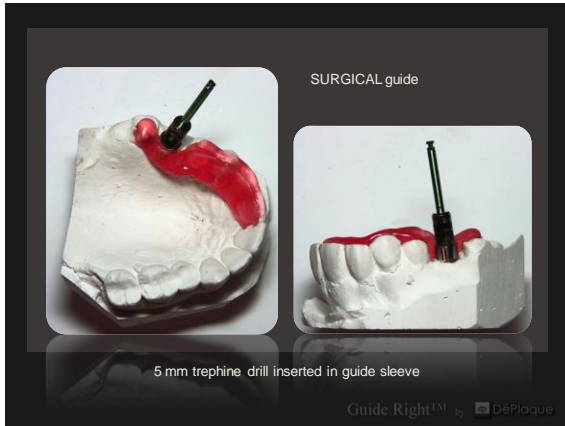
---

---

---

---

---



---

---

---


---

---

---

---

---

 DéPlaque

**Guide Right™ Surgical Guide System**

- fabricate [diagnostic guide]
- evaluate
- correct
- re-fabricate [surgical guide]
- verify
- place

---

---

---

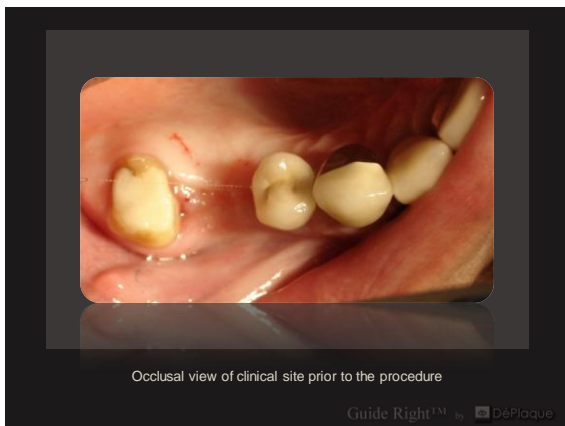
---

---

---

---

---



---

---

---

---

---

---

---

---



Mirror shot with SURGICAL guide in place

Guide Right™ by DePloque

---

---

---

---

---

---

---

---



Guide in place with implant & carrier in place

Guide Right™ by DePloque

---

---

---

---

---

---

---

---



Palatal incision with flap reflected toward the buccal surface  
Cover screw in place

Guide Right™ by DePloque

---

---

---

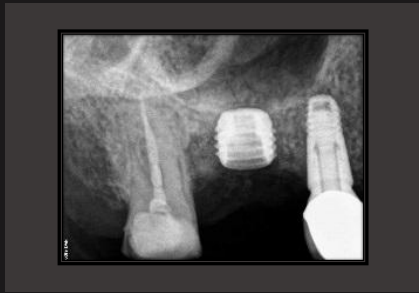
---

---

---

---

---



Final implant placement  
(avoiding a sinus elevation)

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



Verification of accurate placement with SURGICAL guide in place

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

## Case 2

Short Implant 5.5 X 7 mm

site # 3,

- Fabrication DIAGNOSTIC guide
- Evaluate using invivio5 software
- No correction necessary
- Fabricate SURGICAL guide
  - mm guide post 5.25
  - mm guide sleeve 5.3

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

Single Implant Case  
featuring  
2-Piece Guide Post • **Invivo** Evaluation

# 3



Diagnostic Guide      Surgical Guide

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

DéPlaque

Guide Right™ Surgical Guide System

- fabricate diagnostic guide
- evaluate
- correct
- re-fabricate surgical guide
- verify
- place

---

---

---

---

---

---

---

---



3/32" drill positioned in 3/32" hole drilled in cast

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

## Standard Guide Posts



Short Guide Post  
18 mm x 9 mm x 3/32 in.

Straight Guide Post  
30 mm x 2.9 mm x 3/32 in.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



3 mm guide post positioned in proposed implant site

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



3 mm guide post with 3 mm guide sleeve positioned in proposed implant site

Guide Right™ by DePaque

---

---

---

---

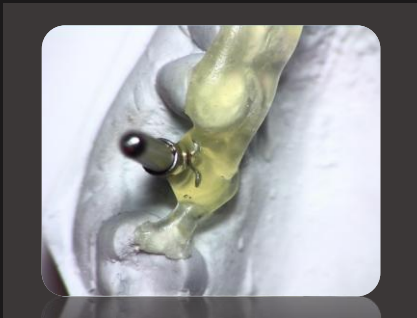
---

---

---

---





Triad® gel added to capture cleat of 3 mm guide sleeve to form DIAGNOSTIC guide

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

DéPlaque

### Guide Right™ Surgical Guide System

- fabricate diagnostic guide
- **evaluate**
- correct
- re-fabricate surgical guide
- verify
- place

---

---

---

---

---

---

---

---

### Creating a Guide Right™ Surgical Guide

Use of **Invivo5** Software

to  
Evaluate, Correct, & Verify  
Prosthetically planned implant trajectory  
prior to drilling the osteotomy

Guide Right™ by DéPlaque

---

---

---

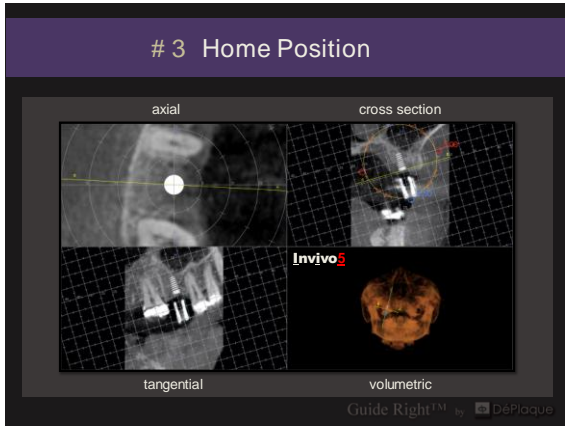
---

---

---

---

---



---

---

---

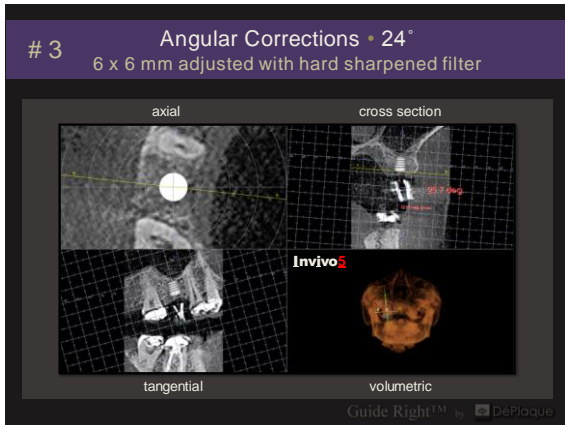
---

---

---

---

---



---

---

---

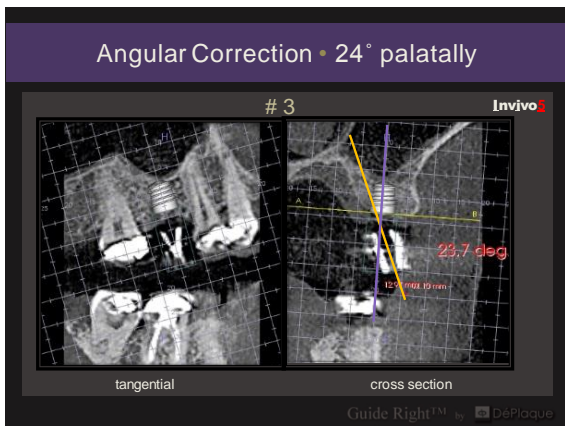
---

---

---

---

---



---

---

---

---

---

---

---

---

# 3 Angular Corrections • Range 15° - 24°

InvivoS

Guide Right™  
Guide Post Bending Tool

Illustrating 15° bend

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

DéPlaque

### Guide Right™ Surgical Guide System

- fabricate [diagnostic guide]
- evaluate
- correct
- re-fabricate [surgical guide]
- verify
- place

---

---

---

---

---

---

---

---

Lower piece of 2-piece guide post (no offset)

Guide Right™ by DéPlaque

---

---

---

---

---

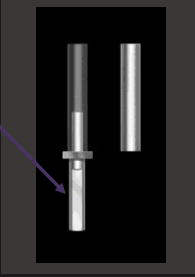
---

---

---

2-Piece Guide Post  
Straight Lower Piece with Upper Removable Piece

The bottom half of all Lower Pieces of the 2-Piece Guide Post are designed with 4 flat sides corresponding with the mesial, distal, buccal & lingual surfaces of the tooth.



Guide Right™ by DePaque

---

---

---


---

---

---

---

---



Upper piece of 2-piece 4.9 mm guide added to lower piece

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

Triad® gel added to capture cleats

3.9 mm guide sleeve on 3.8 mm post      5.1 mm guide sleeve on 4.9 mm post



NOTE: Two different SURGICAL guides were fabricated & used in this case to accommodate the initial 3.8 mm hybrid drill & 5 mm diameter drill

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



---

---

---

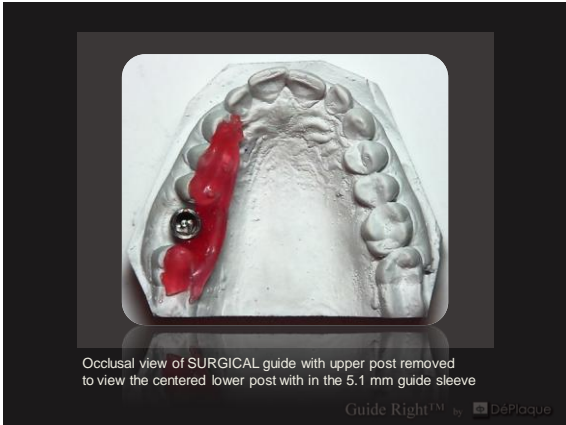
---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

DéPlaque

**Guide Right™ Surgical Guide System**

- fabricate [diagnostic guide]
- evaluate
- correct
- re-fabricate [surgical guide]
- **verify**
- place

---

---

---

---

---

---

---

Verification of correction

Original path of 3/32" drill

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

DéPlaque

**Guide Right™ Surgical Guide System**

- fabricate [diagnostic guide]
- evaluate
- correct
- re-fabricate [surgical guide]
- **verify**
- **place**

---

---

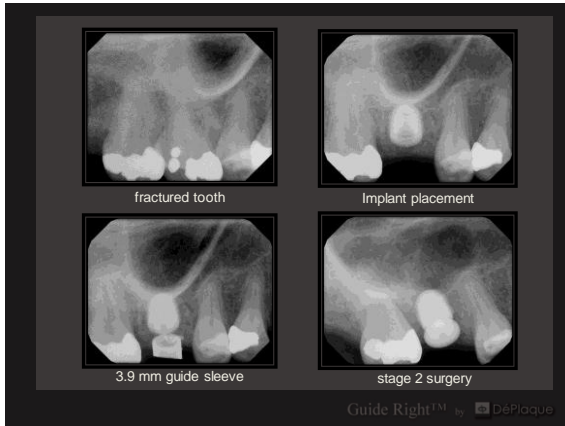
---

---

---

---

---



---

---

---

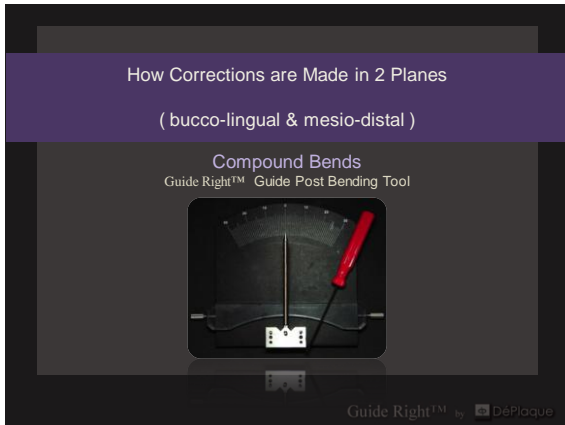
---

---

---

---

---



---

---

---

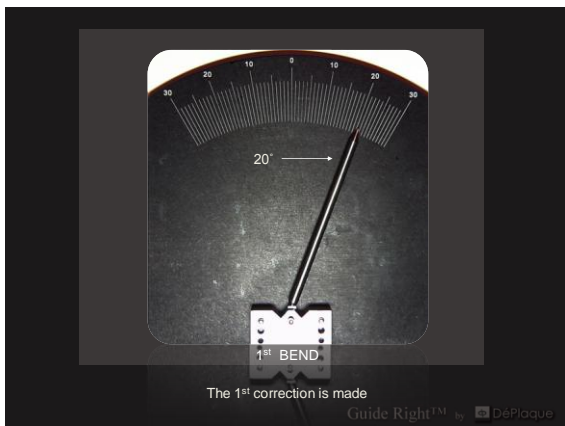
---

---

---

---

---



---

---

---

---

---

---

---

---

PREPARATION for 2<sup>nd</sup> Bend

- After 1<sup>st</sup> correction the set screw is released with hex driver.
- Stylus & post are rotated back to the 0° position.
- Support bar is placed on the bending plate against the stylus & thumb screws are re-tightened against the flat side guide post to maintain the angle of the 1<sup>st</sup> correction while the 2<sup>nd</sup> correction is made with the support bar in place.

Guide Right™ by DePlaque

---

---

---

---

---

---

---

---

---

---

---

---

2<sup>nd</sup> BEND

- The set screw is loosened & stylus with guide post are rotated 90° up off the bending plate.
- The set screw is retightened.
- The 2<sup>nd</sup> correction is now made 90° to the 1<sup>st</sup> bend.

Guide Right™ by DePlaque

---

---

---

---

---

---

---

---

---

---

---

---

RESULT of 2<sup>nd</sup> BEND

The guide post is corrected in the 2<sup>nd</sup> plane 15° while the support bar maintains the 1<sup>st</sup> correction at 20°

Guide Right™ by DePlaque

---

---

---

---

---

---

---

---

---

---

---

---



## Guide Right™ BENDING TOOL

### COMPOUND BEND overview

- Step 1 Position a straight or offset guide post in the bending plate, tightening the set screw against one of the flat surfaces on the lower half of the guide post.
- Step 2 The 1<sup>st</sup> bend can be made to the right or left direction.
- Step 3 The set screw is loosened and the guide post is rotated 90 ° next flat surface.
- Step 4 The 2<sup>nd</sup> bend in the second plane is made after rotating the guide post up away from the surface of the bending plate to register the stylus point back at 0 degrees.
- Step 5 Slide the stylus support bar down under the stylus until it supports the stylus. Tighten the side screws before making the second bend.
- Step 6 The second bend can be made in either direction according to the x-ray.
- Step 7 Remove the stylus and place the guide post back in the cast with the appropriate side indicated by a mark facing the buccal or lingual surface.

*Be sure the post is in the correct position.*

If the post needs to be corrected by a linear movement an offset guide post can be used.  
Off sets available in the 3 mm guide post: 0.5, 1.1, 1.5, 2.0, 2.5, 3.0, 4.0 or 5 mm.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

---

---

## Case 3

### Short Implants

Sites #19 ▶ 4.5 x 7 mm • #20 ▶ 4.5 x 7 • #21 ▶ 3.5 X 10

- Fabrication DIAGNOSTIC guide
- Evaluate using invivo5 software
- Corrections:
  - # 19 1.5 mm offset buccal
  - # 20 2.5 mm offset to the lingual
  - # 21 2.5 mm offset to the lingual
- Fabricate SURGICAL guide

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

---

---

## Implant Case

featuring

2-Piece Guide Post • **Invivo5** Evaluation



Diagnostic Guide



Surgical Guide

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

---

---

---

---



3 mm guide posts positioned in 3/32" holes drilled in cast

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



Lingual view

After lubricating the cast and blocking out undercuts, clear Triad® gel has been applied to capture cleat on the guide sleeve & adjacent teeth to form the DIAGNOSTIC guide.

Guide Right™ by DePaque

---

---

---

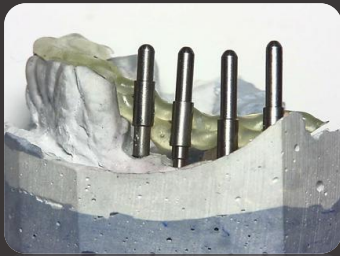
---

---

---

---

---



Buccal view

3 mm diagnostic guide sleeves with cleats positioned toward the palatal surface on 3 mm straight guide posts

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

## Creating a Guide Right™ Surgical Guide

Use of **Invivo5** Software

to  
Evaluate, Correct, & Verify  
prosthodontically planned implant trajectory  
prior to drilling the osteotomy

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

 DéPlaque

## Guide Right™ Surgical Guide System

- fabricate diagnostic guide
- **evaluate**
- correct
- re-fabricate surgical guide
- verify
- place

---

---

---

---

---

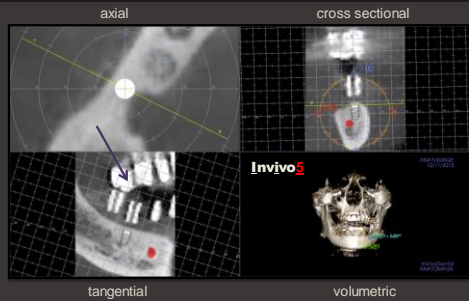
---

---

---

## #19 Home Position

Because of the super-eruption of #15 the position of #18 position will not be used.



Guide Right™ by DéPlaque

---

---

---

---

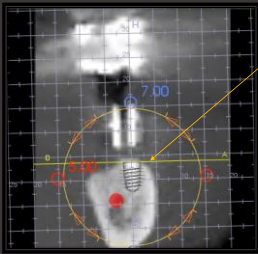
---

---

---

---

#19 Cross Sectional View • 1.5 offset buccal



The virtual implant is a 4.5 X 7 mm implant. The line A - B indicates the level of the slice seen in the axial view

The position of the implant will be corrected 1.5 mm offset toward the buccal surface.

Invivo5

Guide Right™ by DePaque

---

---

---

---

---

---

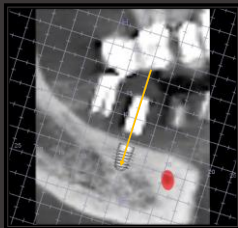
---

---

#19 Tangential View

The virtual implant can be seen in the tangential view Below the guide sleeve. If the line indicating the long axis of the virtual implant passes through the radio-lucent center of the DIAGNOSTIC guide sleeve.

No correction is needed



Invivo5

Guide Right™ by DePaque

---

---

---

---

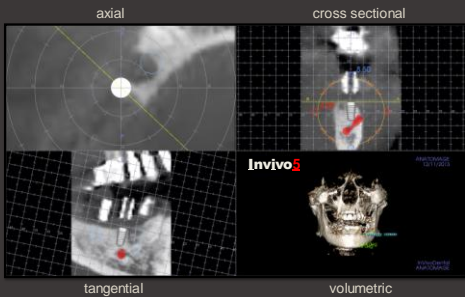
---

---

---

---

#20 Home Position  
4.5 X 7 mm implant



Guide Right™ by DePaque

---

---

---

---

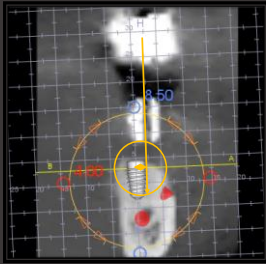
---

---

---

---

### #20 Cross Sectional View • 2.5 mm offset lingual



The line passing through the center of the guide sleeve is offset 2.5 mm from the center of the virtual implant.

**Linear Correction**  
A 2.5 mm offset post will be used to move the sleeve toward the lingual.

InvivoS

Guide Right™ by DePaque

---

---

---

---

---

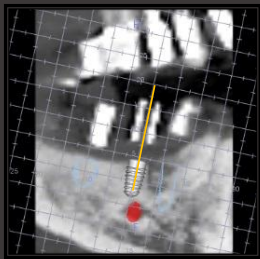
---

---

---

### # 20 Tangential View

The line indicating the long axis of the virtual implant passing through the radio-lucent center of the DIAGNOSTIC guide sleeve in the tangential view indicates NO need for a angle or linear correction mesial or distal.



InvivoS

Guide Right™ by DePaque

---

---

---

---

---

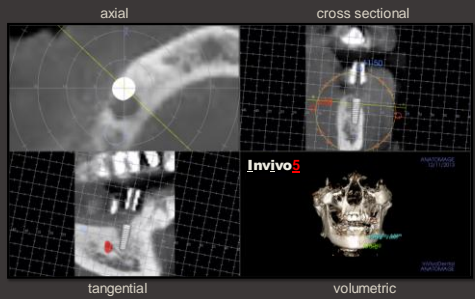
---

---

---

### # 21 Home Position

3.5 x10 mm implant • anterior to the mental foramen



Guide Right™ by DePaque

---

---

---

---

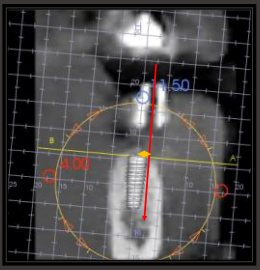
---

---

---

---

#21 Cross Sectional View



The vertical red line indicates the need for a 2.5 mm offset correction to the lingual

Invivo3

Guide Right™ by DéPlaque

---

---

---

---

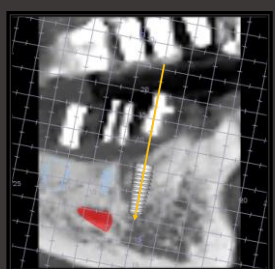
---

---

---

---

#21 Tangential View



The yellow line is passing through the guide sleeve at an angle because the position of the sleeve is now at an angle to the virtual implant .

Invivo3

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

DéPlaque

Guide Right™ Surgical Guide System

- fabricate [diagnostic guide]
- evaluate
- **correct**
- re-fabricate [surgical guide]
- verify
- place

---

---

---

---

---

---

---

---

### Linear Corrections made in this case

#### LINEAR Corrections

- # 19 1.5 mm offset toward the buccal
- # 20 2.5 mm offset toward the lingual
- # 21 2.5 mm offset toward the lingual

SEE  
Guide Right™ Bending Tool Instructions in this presentation

Guide Right™ by DePaque

---

---

---

---

---

---

---

---

### 2-piece offset lower piece guide posts are used to make offset corrections



Guide Right™ by DePaque

---

---

---

---

---

---

---

---



2.5 mm offset posts in sites # 20 & 21  
1.5 mm offset post toward the buccal in site # 19.

Guide Right™ by DePaque

---

---

---

---

---

---

---

---



---

---

---

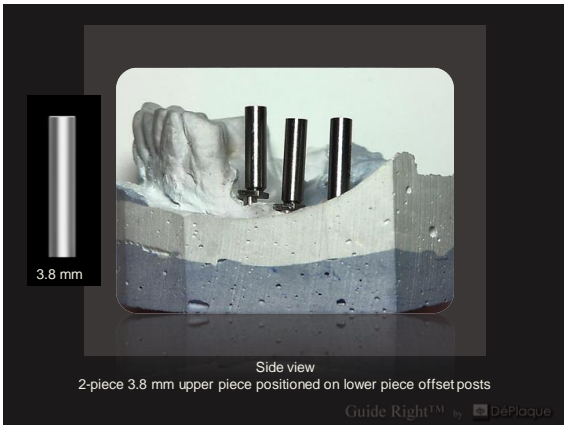
---

---

---

---

---



---

---

---

---

---

---

---

---

It is important that the drill trajectory continue to be maintained while the osteotomy is enlarged.

**THEREFORE**  
multiple guides with appropriate guide sleeve sizes were be used.

2 SURGICAL guides were made & used in this case

- initial SURGICAL guide ( 3 mm guide sleeves )
- 2<sup>nd</sup> SURGICAL guide to accommodate larger drills

Guide Right™ by DePaque

---

---

---

---

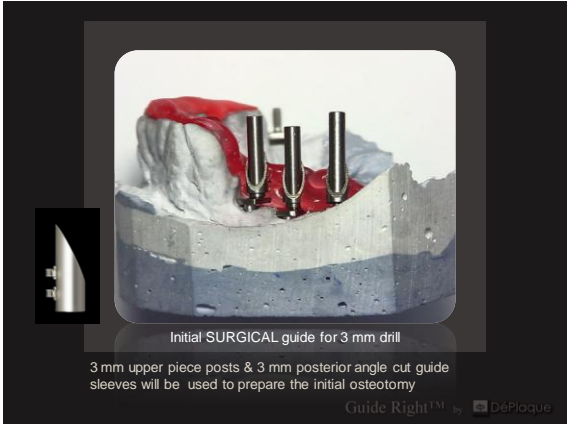
---

---

---

---





---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

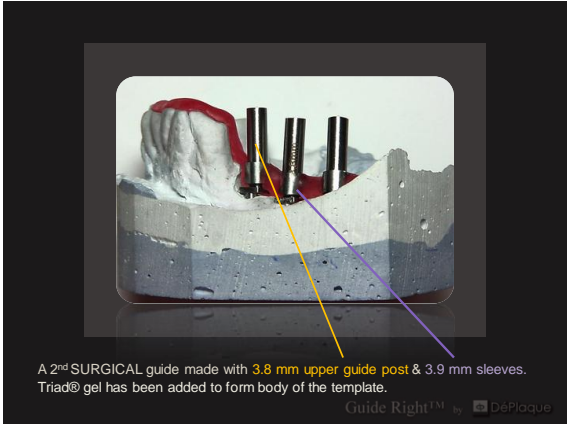
---

---

---

---

---



---

---

---

---

---

---

---

---

---

---



Final SURGICAL guide

View of 3.9 mm guide sleeves with 3.8 mm upper posts allow the use of drills up to 3.8 mm in diameter. Triad® gel is extended to # 29 to increase stability.

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---



### Guide Right™ Surgical Guide System

- fabricate [diagnostic guide]
- evaluate
- correct
- re-fabricate [surgical guide]
- verify
- place implants

---

---

---

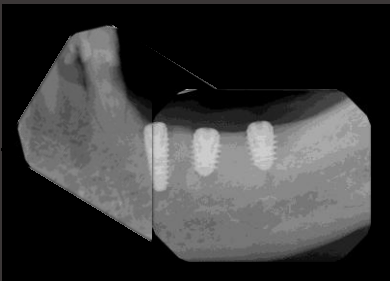
---

---

---

---

---



Resulting implant placement

Guide Right™ by DéPlaque

---

---

---

---

---

---

---

---

DéPlaque

**Guide Right™ Surgical Guide System**  
*fabricate • evaluate • correct • verify • place*

Start With Precision. Place With Confidence.™

1.800.314.0065 • [www.deplaque.com](http://www.deplaque.com)

---

---

---

---

---

---

---

---