

Plastic Surgery Open and Endoscopic Forehead Lift

# endotine®

For All Brow and Forehead Lift Procedures

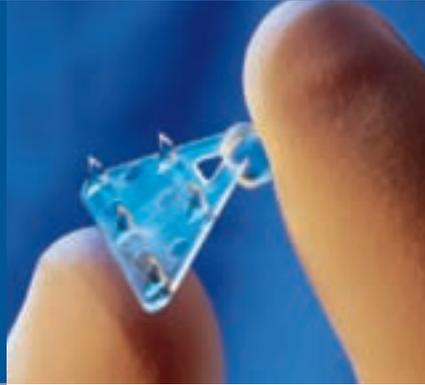


*Revolutionizing  
Soft-Tissue Fixation*

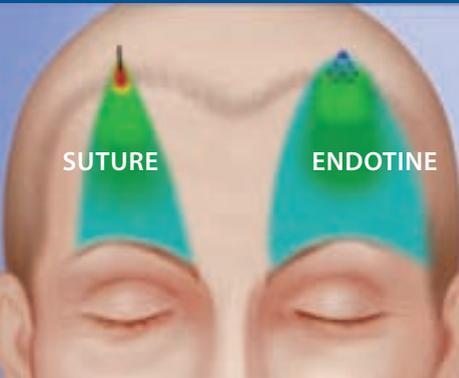
**MICROAIRE®**  
aesthetics

## DESIGNED FOR SIMPLICITY AND PREDICTABILITY

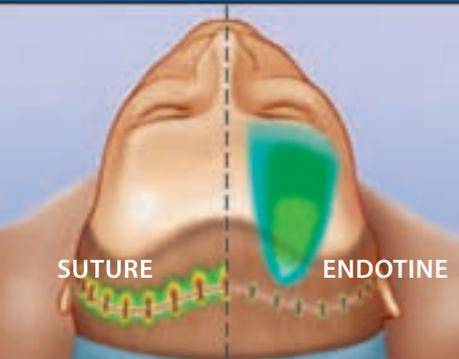
The versatile design can be applied in both endoscopic and open techniques.



*Fast adjustable fixation of soft tissue*



### ENDOSCOPIC APPLICATION



### CORONAL APPLICATION

*Stress concentration is much higher for single point than for multiple point fixation devices.*

*High concentrations of stress can create tissue deformation "stretch" and tissue cutting "cheese wire effect" that may be the cause of forehead re-descent.*

*ENDOTINE technology is designed to distribute tension, maintaining a more stable tissue shape with less distortion and more secure fixation.*

Soft-tissue fixation remains the least controllable and least predictable part of the forehead lift procedure. Until now, only suture based and percutaneous screw fixation techniques were available, often with frustrating results.

The ENDOTINE devices deliver a novel and effective solution for fixation of the scalp tissue, addressing the primary challenge of the forehead lift procedure. ENDOTINE devices feature sutureless MultiPoint Technology (MPT™), a breakthrough platform technology designed to facilitate facial aesthetic procedures, reduce operating time and improve surgical outcomes.

The device's unique design provides multiple points of contact with the suspended tissue, distributing tension over a wide area to maximize fixation strength.

#### Fast

ENDOTINE allows fixation times approaching less than one minute per side in the hands of experienced clinicians.

#### Adjustable

ENDOTINE allows simple readjustment of the tissue for greater aesthetic control of brow height and shape.

#### Secure

ENDOTINE's robust construction and multiple-tine design provide secure strength throughout the crucial, early healing period.

#### Endotine is designed for optimal control of brow height and shape.

##### Sutureless Fixation

Eliminates cumbersome suture, bulky knots and lack of adjustability.

##### Multiple Tines

Unmatched structural integrity and balanced distribution of tension.

##### Bioabsorbable Co-polymer

Eliminates secondary surgery for screw removal.

**TENSION FREE CLOSURE FOR OPEN TECHNIQUES** - The absence of tension on scalp closure greatly minimizes scar widening and related alopecia.

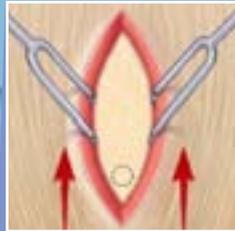
**REDUCE POTENTIAL OVER AND UNDER CORRECTIONS** by dramatically reducing post-op tissue stretch and accurately holding tissue where you place it.

**SUPERIOR FIXATION STRENGTH** provides consistent, predictable results from patient to patient.

1

### MAKE THE INCISION

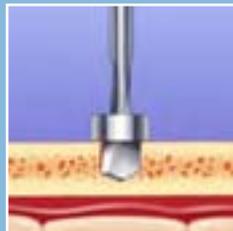
Make a sagittal, paramedian incision in the usual fashion. Perform the dissection, making sure to achieve adequate release.



2

### DETERMINE THE DRILL HOLE SITE

Lift the brow to the desired position. Plan the cranial hole so that the implant will ultimately lie under the hair-bearing scalp.



3

### MAKE THE HOLE

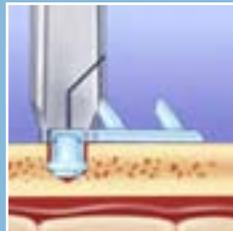
Use the ENDOTINE Forehead drill bit to create a hole at the drill site. The hole should be located medial to the temporal fusion line and anterior to the coronal suture. Drill all the way to the bit sleeve. Suction the hole to remove all debris.



4

### GRASP THE DEVICE

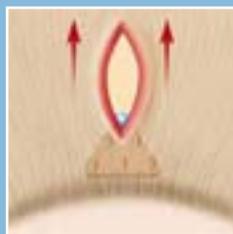
Use the ENDOTINE Forehead Insertion Tool to grasp the implant and remove it from its packaging. One needle-like tip of the tool fits into the hole in the ENDOTINE Forehead platform and the other end grasps the implant post.



5

### PLACE THE DEVICE

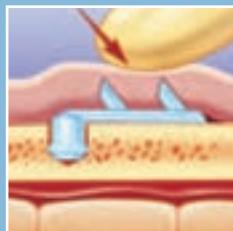
Insert the ENDOTINE Forehead implant into the drilled hole. Push until the platform is flush with the cranium. Release the Insertion Tool from the implant.



6

### ELEVATE THE TISSUE

Elevate brow tissue to desired position. The implant may lie either anterior or lateral to the incision.



7

### SECURE THE TISSUE

Apply digital pressure to ensure penetration of the tissue by the device tines. Close the incision. A gentle pressure dressing is recommended to prevent dislodgement.

## The Right Size for All Types of Patients

Select from three different sizes to match the specific needs of your patient.

### 22202 The ENDOTINE Forehead 3.0, 2-Pack

Designed for patients with below-average scalp thickness. This ENDOTINE uses tines that are 3.0mm in length to reduce issues of palpability or sensitivity.

### 23202 The Ultratine Forehead 3.0, 2-Pack

Designed for patients with below-average scalp thickness. This ULTRATINE uses tines that are 3.0mm in length to reduce issues of palpability or sensitivity.

### 22102 The ENDOTINE Forehead 3.5, 2-Pack

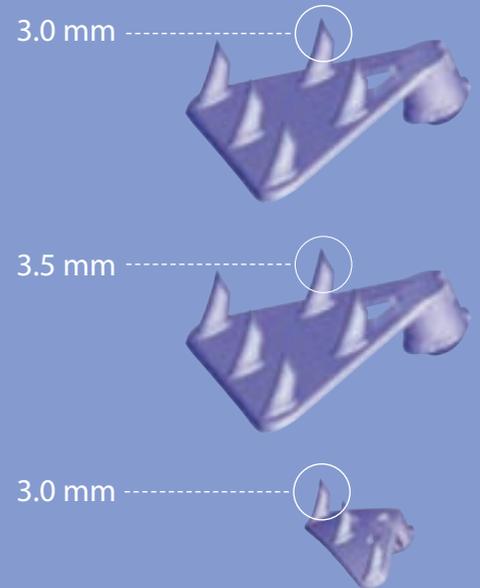
Features tines that are 3.5mm in length and is best for patients with average to thick scalps where more secure fixation is desired.

### 23102 The ULTRATINE Forehead 3.5, 2-Pack

Features tines that are 3.5mm in length and is best for patients with average to thick scalps where more secure fixation is desired.

### CFD-010-0167 The ENDOTINE Triple 3.0

Offers a 60% smaller footprint than the Forehead device and is best for patients with high hairlines, thin scalps, balding patients or those where a smaller, sub 10mm incision is needed.

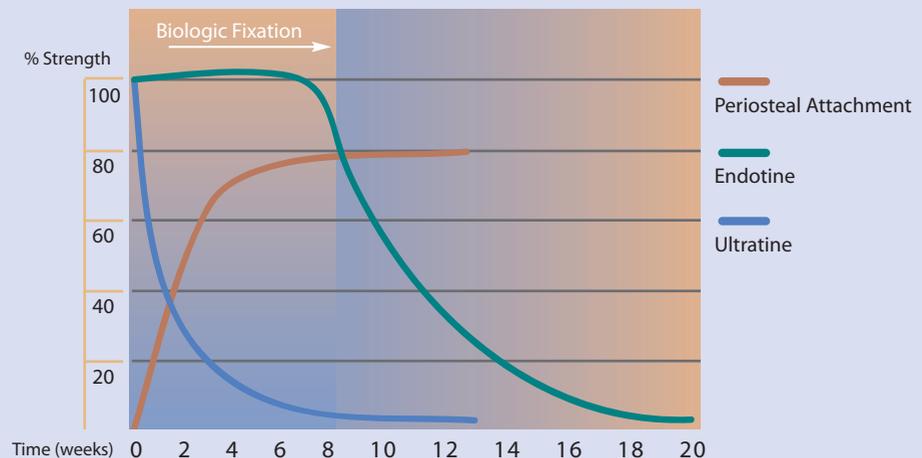


## The New **ultratine**<sup>®</sup> *forehead*

Surgeons have asked for a more rapidly absorbing Endotine Forehead - one that holds the forehead soft tissue with as much security and placement control as the current Endotine, but provides more comfort to patients during the post surgical phase. We are pleased to introduce Ultratine to answer this need.

The Ultratine Forehead consists of a similar, but uniquely different polylactic acid and polyglycolic acid polymer blend that bio-absorbs in a more desirable way. The structure of the material quickly softens under the skin as periosteal attachment is complete, greatly enhancing the patient's post operative experience.

### Ultratine versus Endotine Absorption Profile



### Ultratine Key Performance Traits:

- Ultratine loses 90% of its strength in 60 days, while Endotine loses only 37% of its strength in 60 days.
- Ultratine's rapid strength degradation after periosteal attachment means the patient has less palpability and sensitivity after 60 days.

*The low-profile ENDOTINE Triple fixation device provides high-performance results*

**Low-Profile** Three tines on an ultra-thin platform designed to reduce palpability and visibility.

**High-Performance** Predictable brow elevation and secure tissue fixation provided by our proven MultiPoint Technology (MPT™).

### *An Expanded Approach to Forehead Lifts*

*The ENDOTINE Triple features only three tines versus five for the ENDOTINE Forehead™, and a platform that is 60% smaller.*



### *Fewer Tines, More Patients*

The Triple provides the security and predictability of ENDOTINE® multipoint fixation to patients who are not currently candidates because of concerns with palpability, visibility, sensitivity or prolonged absorption.

#### **Sensitive patients**

Three 3.0mm tines and an ultra thin platform offer security without sensitivity for patients who may be affected by palpability.

#### **Balding males or those with receding hairlines**

With a low profile for reduced visibility and a petite size for a sub-10mm incision, the Triple is ideally suited for patients who are especially concerned with noticeable scarring or swelling.

#### **High hairlines**

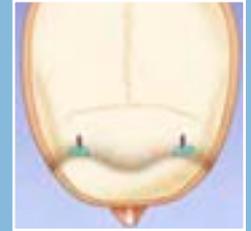
Reduced visibility and incision size allow the Triple to be placed confidently below the hairline.

#### **Busy, active patients**

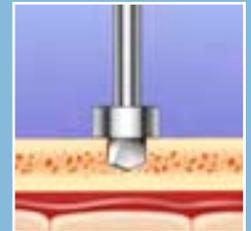
With one third the mass of an ENDOTINE Forehead, the Triple will more quickly absorb to an impalpable size, satisfying sophisticated and discriminating patients who demand a rapid recovery and quick return to daily activities.

## the ENDOTINE TRIPLE PROCEDURE

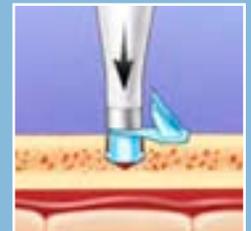
### 1 MAKE THE INCISION



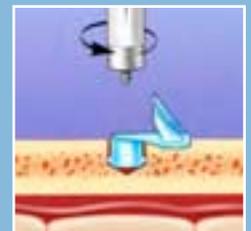
### 2 MAKE THE HOLE



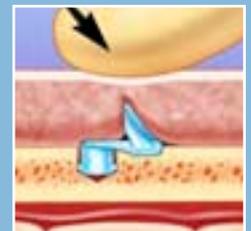
### 3 PLACE THE DEVICE



### 4 WITHDRAW THE TOOL



### 5 SECURE THE TISSUE



**ENDOTINE Forehead Instrument Kit:**

ENDOTINE Forehead Insertion Tool

2 drill bits

Not required for use with ENDOTINE Triple.

(Devices sold separately)



## Ordering Information

PRODUCT NUMBER	PRODUCT NAME	PRODUCT DESCRIPTION	QUANTITY
22202	ENDOTINE Forehead™ 3.0	Bioabsorbable brow fixation device, 3.0mm tine height.	2 Pack
22102	ENDOTINE Forehead 3.5	Bioabsorbable brow fixation device, 3.5mm tine height.	2 Pack
23202	ULTRATINE Forehead™ 3.0	Bioabsorbable brow fixation device, 3.0mm tine height.	2 Pack
23102	ULTRATINE Forehead 3.5	Bioabsorbable brow fixation device, 3.5mm tine height.	2 Pack
CFD-010-0167	ENDOTINE Triple 3.0	Bioabsorbable brow fixation device, 3.0mm tine height. Includes disposable drill bit and insertion tool.	Single
CFD-080-0177	ENDOTINE TransBleph™ 3.0	Bioabsorbable brow fixation device, 3.0mm tine height. Includes disposable drill bit and insertion tool.	Single
CFD-080-0167	ENDOTINE TransBleph™ 3.5	Bioabsorbable brow fixation device, 3.5mm tine height. Includes disposable drill bit and insertion tool.	Single
13005	ENDOTINE Ribbon™	Bioabsorbable brow fixation device, 2.5mm tine height.	5 Pack
CFD-060-0197	ENDOTINE Midface™ ST 4.5	Bioabsorbable midface suspension device, 4.5mm tine height. Fixes to soft tissue.	Single
CFD-020-0197	ENDOTINE Midface™ B 4.5	Bioabsorbable midface suspension device and anchor screws. Fixes to bone.	Single
CFD-020-4320	ENDOTINE Midface B Instrument Kit	Clipper, drill bit, tap tool, anchor inserter and sterilization tray with lid.	Single
CFD-010-4320	ENDOTINE Forehead Instrument Kit	ENDOTINE Forehead insertion tool, drill bits and sterilization tray with lid.	Single
CFD-899-4000	Manual Surgical Drill with ENDOTINE implants	Manual surgical hand drill	Single
19005	SurgiWire™ Incisionless Dissector	Subcutaneous dissection device	5 Pack

# endotine®

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LBL-010-7020 Rev F

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**MICROAIRE®**  
aesthetics

**MicroAire Surgical Instruments**  
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Charlottesville VA 22911

*Two Surgical Approaches*

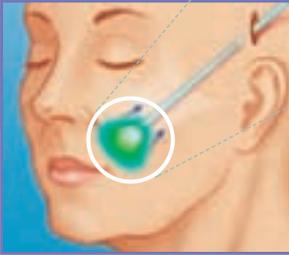
*Two Product Choices*

*Multiple Vector Options*

**endotine**<sup>®</sup>  
*midface*

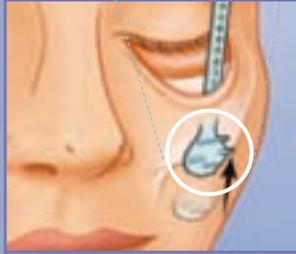


Choose Your Vector.



### *Midface ST* SUSPENSION

- Temporal or oral retrograde placement options
- Secure soft tissue fixation
- Easy adjustability for optimal correction
- Reduced operative time



### *Midface B* SUSPENSION

- Utilizes a lower blepharoplasty incision
- Vertical vector lift
- Securely anchors to infraorbital rim with a bioabsorbable screw
- No endoscope required

Volume enhancement and projection with the ENDOTINE Midface implants is as simple as the devices are elegant. Easily deployed, their integrated leashes make adjustments simple for optimal control and correction. The bioabsorbable material is present during the critical healing period and then is reabsorbed.

The ENDOTINE Midface devices. Raising midface surgery to an entirely new level.



endotine® *midface*

## MULTIPOINT FIXATION DELIVERS RESULTS IN MIDFACE SUSPENSION

There's a new concept in midface surgery. One that for the first time delivers enhanced control over conventional approaches to soft tissue fixation.

Now, with both of the ENDOTINE Midface™ devices, you can eliminate cumbersome fixation suture with a unique and effective solution that utilizes multiple points of contact to suspend delicate midface tissue. These patented devices incorporate five tiny tines to distribute tension over a wide area, maximizing fixation strength and holding power. What's more, the ENDOTINE Midface implants facilitate rapid deployment via temporal, oral, or lower bleph incisions in minutes, saving valuable OR time while simplifying the surgical procedure. All of which can expand your treatment options and your practice.

- **FAST** The ENDOTINE Midface implants provide secure soft tissue fixation in five minutes or less in the hands of an experienced surgeon.
- **ADJUSTABLE** ENDOTINE Midface devices allow simple adjustment of tension and position for greater aesthetic control of cheek elevation and projection.
- **SECURE** By distributing elevation forces over five tines, the proprietary multipoint technology offers unmatched security of tissue fixation.



### 1

#### INITIAL INCISIONS

The midface subperiosteal dissection is performed using the surgeon's typical temporal approach, which may include additional incisions (buccal or periorbital). Dissection should continue to the inferior maxilla to assure that the fixation platform is positioned over the maxillary antrum after elevation.

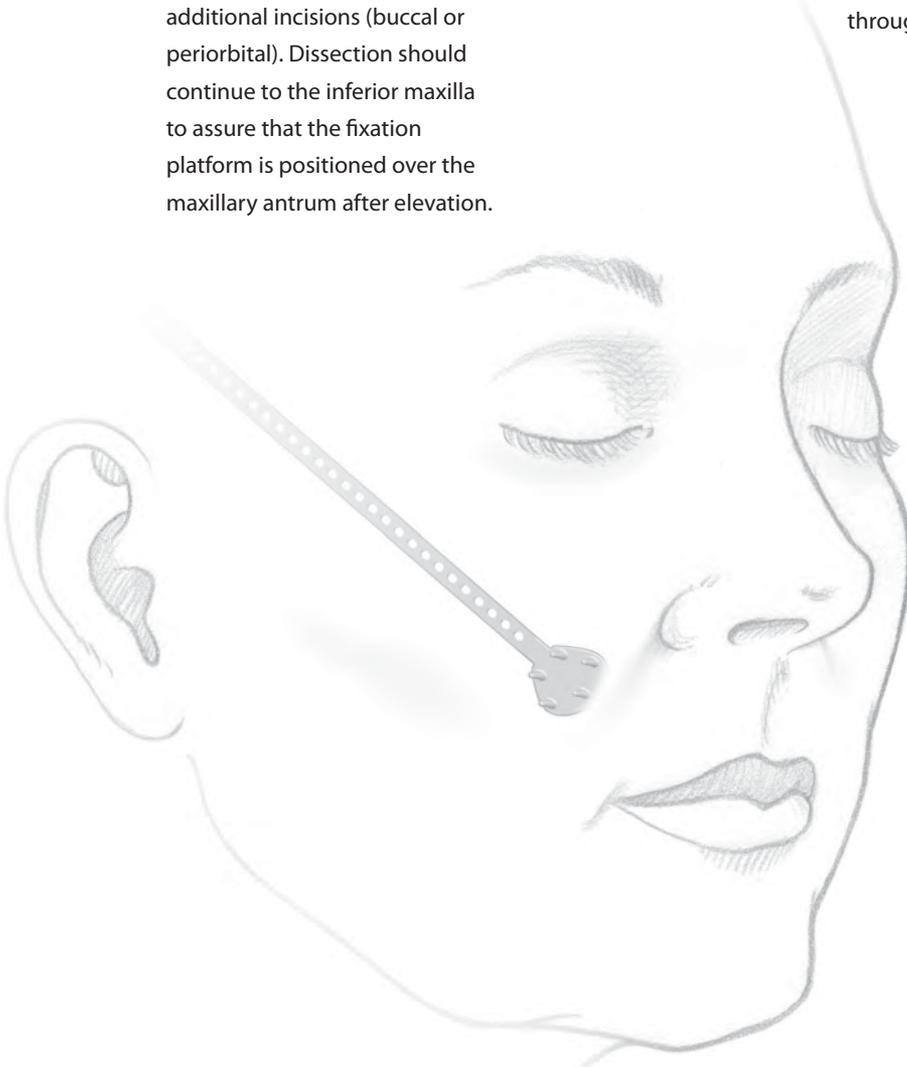
### 2

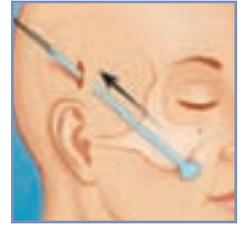
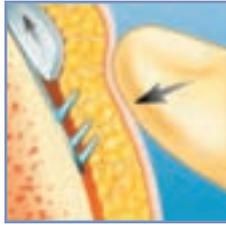
#### PLACEMENT

Insert the Midface device through the temporal incision to the desired position.

#### PLACEMENT OPTIONS

Alternatively, the implant may be removed from the insertion tools and inserted in a retrograde fashion through an oral incision.





**3**  
**DEPLOYMENT**  
With the fixation platform at the inferior recess of the dissection, retract the plastic cover by squeezing the release mechanism.

**4**  
**FIXATION**  
Once the platform is in position and deployed, apply digital pressure over the cheek to engage.

**5**  
**INSERTION TOOL REMOVAL**  
Remove the insertion tools while maintaining digital pressure on the fixation platform.

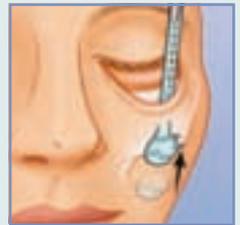
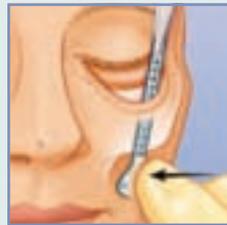
**6**  
**ELEVATION**  
Elevate the midface tissues to the desired position by applying tension to the anchoring leash exiting the temporal incision.

Anchor the leash to the temporal fascia with suture and trim leash to lay flat in the incision.

### **MULTIPOINT TECHNOLOGY:**

#### **THE SUTURELESS SOLUTION TO THE PROBLEM OF FIXATION**

MICROAIRE IS REVOLUTIONIZING SOFT TISSUE FIXATION BY PROVIDING A RANGE OF PRODUCTS AND APPLICATIONS BASED ON ITS UNIQUE AND PROPRIETARY MULTIPOINT TECHNOLOGY. THESE IMPLANTABLE, BIOABSORBABLE DEVICES ARE DESIGNED WITH THE GOAL OF ENABLING SUTURELESS FIXATION, REDUCING OPERATING TIME, SIMPLIFYING PROCEDURES, AND OPTIMIZING CLINICAL RESULTS.



**1**

### INITIAL INCISIONS

The midface infraorbital approach is performed using the surgeon's standard technique. Dissection should extend to the inferior maxillary area.

**2**

### PLACEMENT

Insert the Midface B device through the infraorbital incision and advance it to the desired position.

**3**

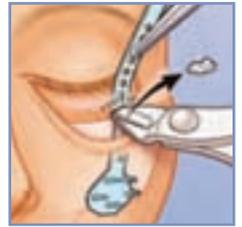
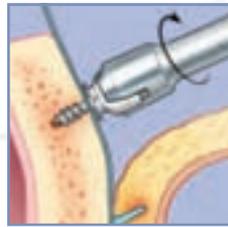
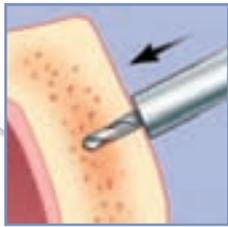
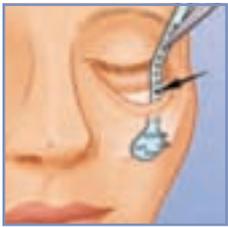
### FIXATION

Once the platform is in position, apply digital pressure over the cheek to engage.

**4**

### ELEVATION

Elevate the midface tissues to the desired position by applying tension to the anchoring leash.



**5**  
**SCREW PLACEMENT**  
Once optimal midface elevation has been achieved, note an appropriate point on the infraorbital rim or zygomatic bone for screw anchor placement.

**6**  
**CREATE ANCHOR POINT**  
An anchoring hole for the Midface B is drilled at the desired position using the reusable drill bit.  
  
Tap the screw threads into the drilled hole, using the reusable tap.

**7**  
**SCREW INSTALLATION**  
Gently and slowly advance the screw anchor with installation tool in a clockwise fashion.

**8**  
**TRIM**  
Using clipper tool, trim off winged portion of the anchor screw and excess leash.



Each ENDOTINE Midface ST comes pre-loaded, ready for immediate placement.



ENDOTINE Midface B Instrument Kit comes with drill bit, tap tool, installation tool, and clipper. (Devices are sold separately)

CAT#	PRODUCT NAME	PRODUCT DESCRIPTION	QUANTITY
CFD-060-0197	ENDOTINE Midface™ ST 4.5	Bioabsorbable midface suspension device with 4.5mm tine height, fixes to soft tissue	Single
CFD-020-0197	ENDOTINE Midface™ B 4.5	Bioabsorbable midface suspension device and anchor screws, fixes to bone	Single
CFD-020-4320	ENDOTINE Midface B Instrument Kit	Clipper, drill bit, tap tool, anchor inserter and sterilization tray with lid	Single
CFD-080-0177	ENDOTINE TransBleph™ 3.0	Bioabsorbable brow fixation device with 3.0mm tine height, including disposable drill bit and insertion tool	Single
CFD-080-0167	ENDOTINE TransBleph™ 3.5	Bioabsorbable brow fixation device with 3.5mm tine height, including disposable drill bit and insertion tool	Single
22202	ENDOTINE Forehead™ 3.0	Bioabsorbable brow fixation device, with 3.0mm tine height	2 Pack
22102	ENDOTINE Forehead 3.5	Bioabsorbable brow fixation device with 3.5mm tine height	2 Pack
CFD-010-0167	ENDOTINE Triple 3.0	Bioabsorbable brow fixation device with 3.0mm tine height, including disposable drill bit and insertion tool	Single
CFD-010-4320	ENDOTINE Forehead Instrument Kit	ENDOTINE Forehead insertion tool, drill bits, sterilization tray with lid	Single
CFD-899-4000	Manual Surgical Drill with ENDOTINE implants	Manual surgical hand drill for use	Single

PATENT PENDING: This product is covered by one or both of the following U.S. Patents: 6,645,226 and 6,485,503.



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LBL-899-7125 Rev D

Plastic Surgery Direct Browlift

*A totally new approach to*

*Upper Facial Rejuvenation*

endotine<sup>®</sup>  
*transbleph*



**MICROAIRE<sup>®</sup>**  
aesthetics

# Bleph Incision Browlift Result.

*The ENDOTINE TransBleph is the best of both worlds for rejuvenation surgeries: the pioneering fixation of multipoint, bioabsorbable implants, and the ability to perform two effective procedures through a single incision—without the need of general anesthesia or expensive equipment.*



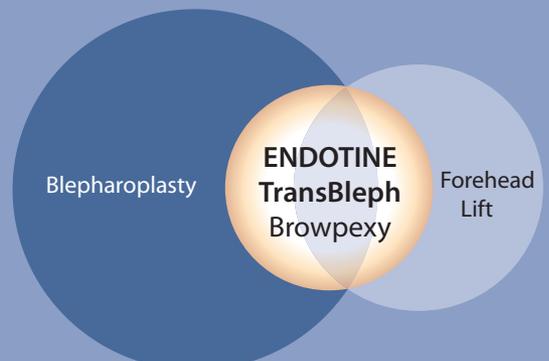
With the TransBleph, you can now offer your patients a dynamic new combination in eye rejuvenation that is simple, quick and direct.

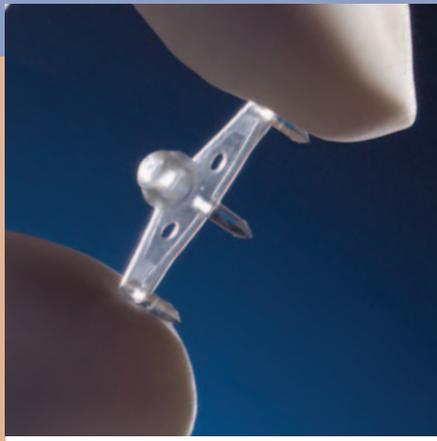
**Simple and Quick** The entire procedure is performed under local anesthesia and can be completed in just minutes per side.

**Secure and Adjustable** Our patented, multipoint design provides secure fixation and the ability to easily readjust brow height for optimal correction and position.

**More Options** Your upper bleph patients with mild to moderate brow ptosis who are reluctant to undergo a conventional full forehead lift may now become surgical candidates with this less invasive procedure.

*Expand Your Market*





## endotine<sup>®</sup> *transbleph*

### *For Direct Browpexy*

**DIRECT FIXATION FOR DIRECT RESULTS** The ENDOTINE TransBleph is a revolutionary new product that allows you to perform a browlift through a single, upper lid incision used for a conventional blepharoplasty. Using our patented, multipoint soft tissue fixation technology—via a small, three tined bioabsorbable implant—you now have new opportunities to help your patients regain a youthful, beautiful appearance around the eyes, without undergoing a complete forehead lift.

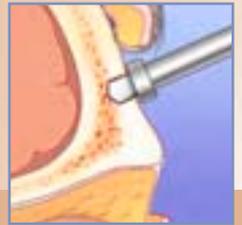
**Closer is better** The ENDOTINE TransBleph is placed underneath the brow and anchored directly to the underlying bone for secure brow elevation, with minimal subperiosteal dissection required.

**Bleph and brow, an unbeatable combination** You can now achieve the combined goals of removing upper eyelid skin and repositioning of the brow in a single surgical session.

**No endoscope required** By utilizing the upper blepharoplasty incision for access, the ENDOTINE TransBleph helps simplify the browlift procedure. No expensive endoscopic equipment is required meaning fewer instruments to set up, process and maintain.

## TransBleph Procedure

The ENDOTINE TransBleph:  
Fast. Simple. Effective.



### THE PROCEDURE\*:

1

#### APPROACH

The supraorbital rim is approached subperiosteally through an upper blepharoplasty incision. The brow is released to create adequate mobility.

2

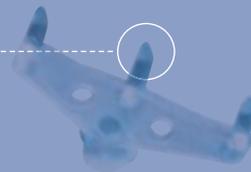
#### MAKE THE HOLE

An anchoring hole for the ENDOTINE TransBleph is drilled in the frontal bone using the enclosed drill bit.

### AN ENDOTINE TRANSBLEPH FOR ALL PATIENT TYPES

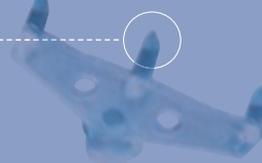
CFD-080-0177 ENDOTINE TransBleph features tines with tips that are 3.0mm above the platform. This size is designed for patients with thin brow tissue where sensitivity to tine palpability may be a concern.

3.0 mm

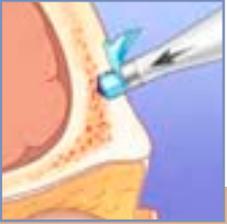


CFD-080-0167 ENDOTINE TransBleph features tines with tips that are 3.5mm above the platform. This size is designed for patients with thick brow tissue where more aggressive fixation is desired.

3.5 mm



The ENDOTINE TransBleph bioabsorbable implant extends your treatment capabilities. Once an upper lid blepharoplasty incision is completed, the incision is advanced to the superior border of the orbital rim. Subperiosteal dissection is then completed to release the brow.



**3**  
**PLACE THE DEVICE**  
The implant is inserted into the hole until the platform lays flush against the frontal bone.



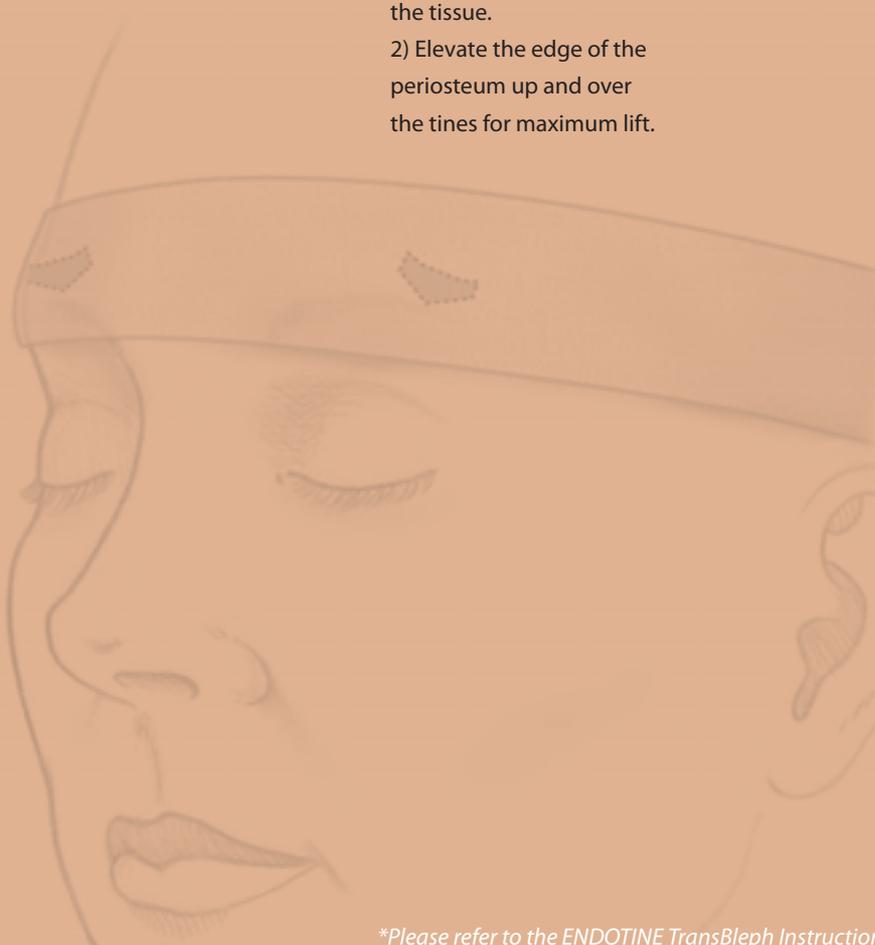
**4**  
**RELEASE THE DEVICE**  
The implant is released from the insertion tool.



**5**  
**TWO FIXATION POINTS**  
1) Elevate the periosteum to achieve the desired brow height. Use digital pressure to engage the tissue.  
2) Elevate the edge of the periosteum up and over the tines for maximum lift.



**6**  
**CLOSURE**  
The incision is closed with standard technique and a compression bandage is applied.



*\*Please refer to the ENDOTINE TransBleph Instructions for use for complete procedure instructions.*

## Ordering Information



Each ENDOTINE TransBleph comes preloaded, ready for immediate placement.

CAT#	PRODUCT NAME	PRODUCT DESCRIPTION	QUANTITY
CFD-080-0177	ENDOTINE TransBleph™ 3.0	Bioabsorbable brow fixation device with 3.0mm tine height, including disposable drill bit and insertion tool	Single
CFD-080-0167	ENDOTINE TransBleph™ 3.5	Bioabsorbable brow fixation device with 3.5mm tine height, including disposable drill bit and insertion tool	Single
CFD-060-0197	ENDOTINE Midface™ ST 4.5	Bioabsorbable midface suspension device with 4.5mm tine height, fixes to soft tissue	Single
CFD-020-0197	ENDOTINE Midface™ B 4.5	Bioabsorbable midface suspension device and anchor screws, fixes to bone	Single
CFD-020-4320	ENDOTINE Midface B Instrument Kit	Clipper, drill bit, tap tool, anchor inserter and sterilization tray with lid	Single
22202	ENDOTINE Forehead™ 3.0	Bioabsorbable brow fixation device, with 3.0mm tine height	2 Pack
22102	ENDOTINE Forehead 3.5	Bioabsorbable brow fixation device with 3.5mm tine height	2 Pack
CFD-010-0167	ENDOTINE Triple 3.0	Bioabsorbable brow fixation device with 3.0mm tine height, including disposable drill bit and insertion tool	Single
CFD-010-4320	ENDOTINE Forehead Instrument Kit	ENDOTINE Forehead insertion tool, drill bits, sterilization tray with lid	Single
CFD-899-4000	Manual Surgical Drill	Manual surgical hand drill for use with ENDOTINE implants	Single

PATENT PENDING: This product is covered by one or both of the following U.S. Patents: 6,645,226 and 6,485,503.



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