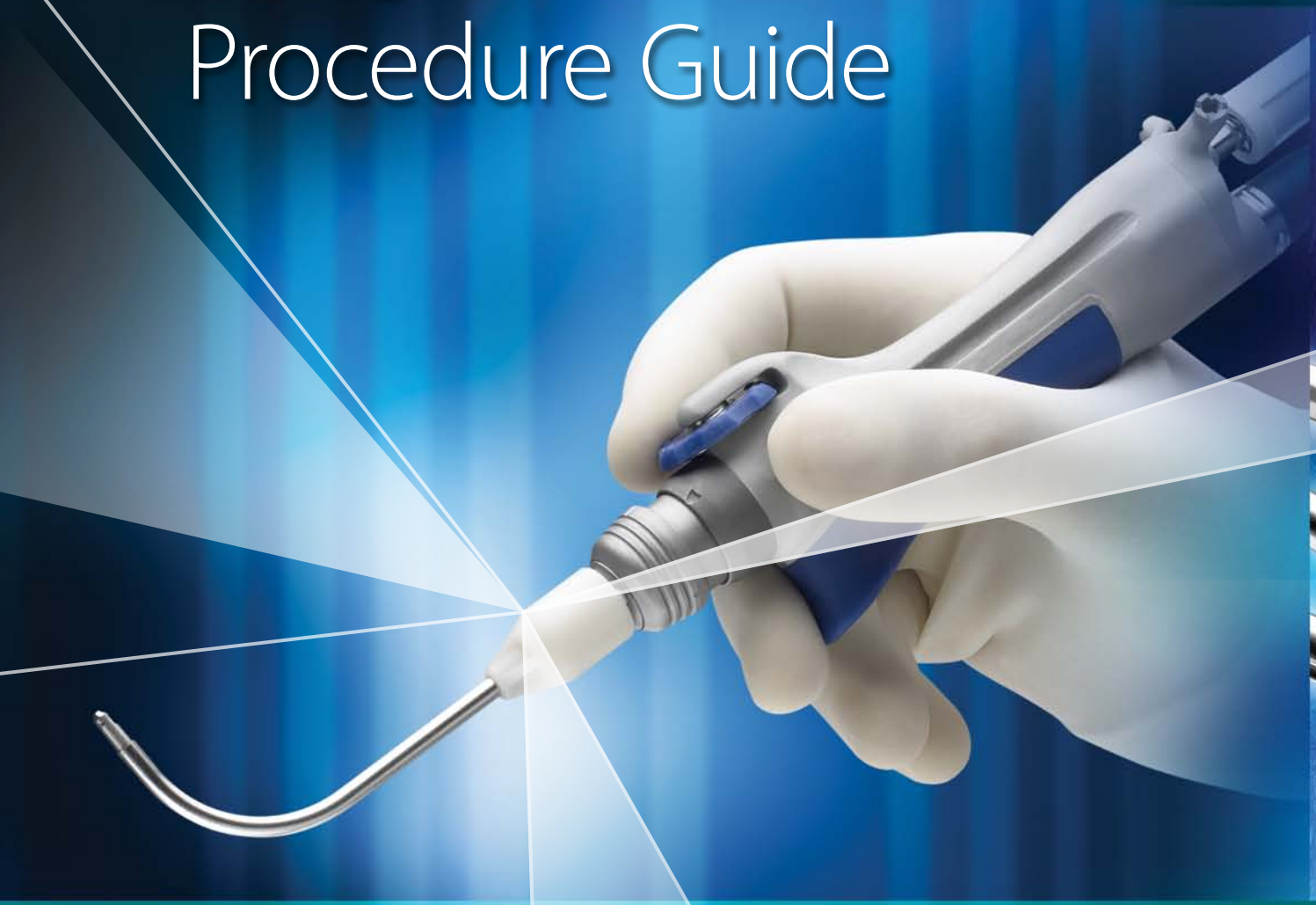
Medtronic

Straightshot® M4 Microdebrider Procedure Guide



BLADES AND BURS FOR NASAL, SINUS, LARYNGEAL, AND BRONCHIAL SURGERY

1997-Present

Four Generations of Power Consoles and Handpieces

XPS®

XPS® 2000

XPS® 3000

Did you know?

Powered sinus debriders were developed and patented by Medtronic Xomed in 1997.

Powered surgery is firmly established for successfully managing both simple and complex ENT disorders. Since 1997, Medtronic ENT has developed a comprehensive range of powered surgery tools for performing minimally invasive ENT procedures in adults and children with greater precision and speed.

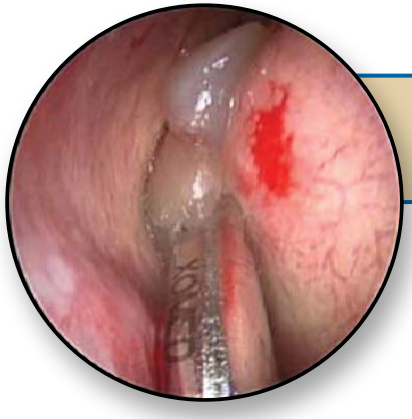
Straightshot® Magnum®

The current generation of powered ENT tools includes the IPC® Integrated Power Console and Straightshot® M4 Microdebrider. This dynamic combination provides:

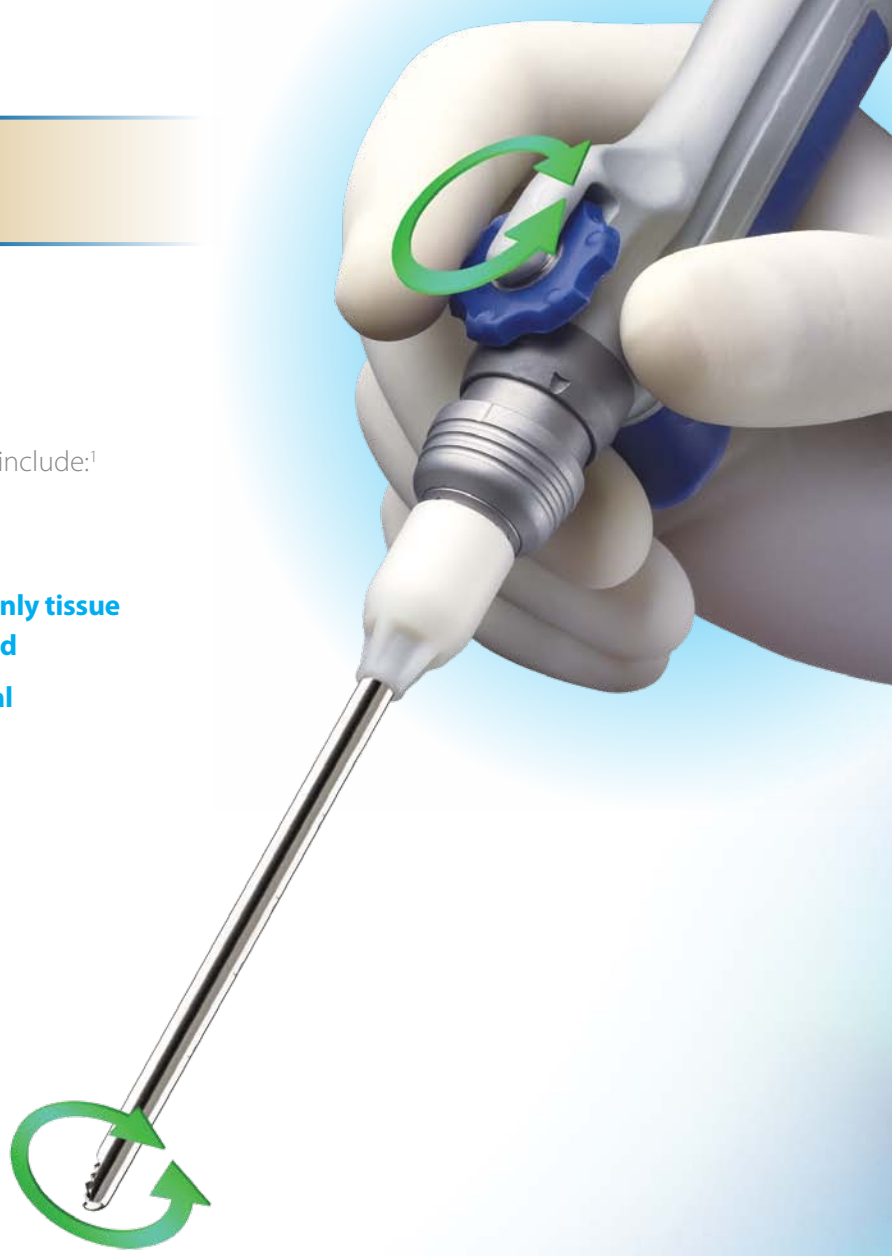
- The widest range of application-specific blades and burs
- Blade tips that rotate 360°
- Factory-calibrated blades for surgical navigation
- IntelliFlow™ remote control irrigation
- Seamless integration with other Medtronic ENT devices

IPC® Integrated Power Console

Straightshot® M4 Microdebrider with Rotatable Blades



Polyp Removal



The advantages of the Straightshot® M4 Microdebrider include:[1]

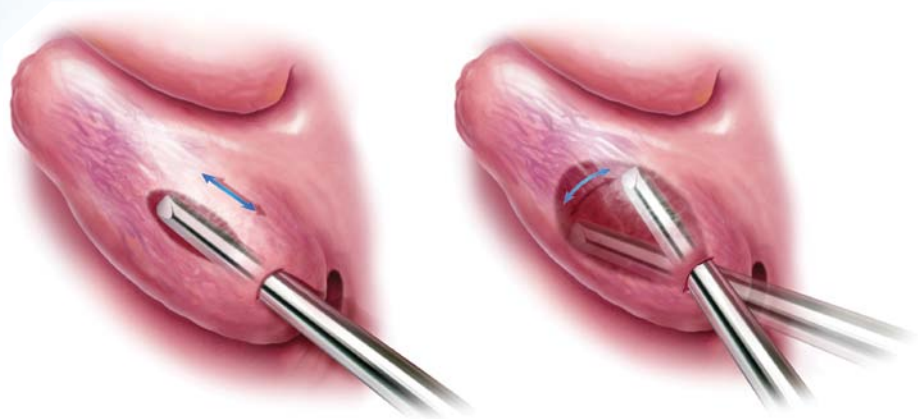
- **Excellent control and precision for resection of soft tissue**
- **Preservation of surrounding tissue because only tissue suctioned into the opening is cut and removed**
- **Enhanced visibility due to the suction removal of blood and debris from the surgical field**

Tricut® Blade - 1884004

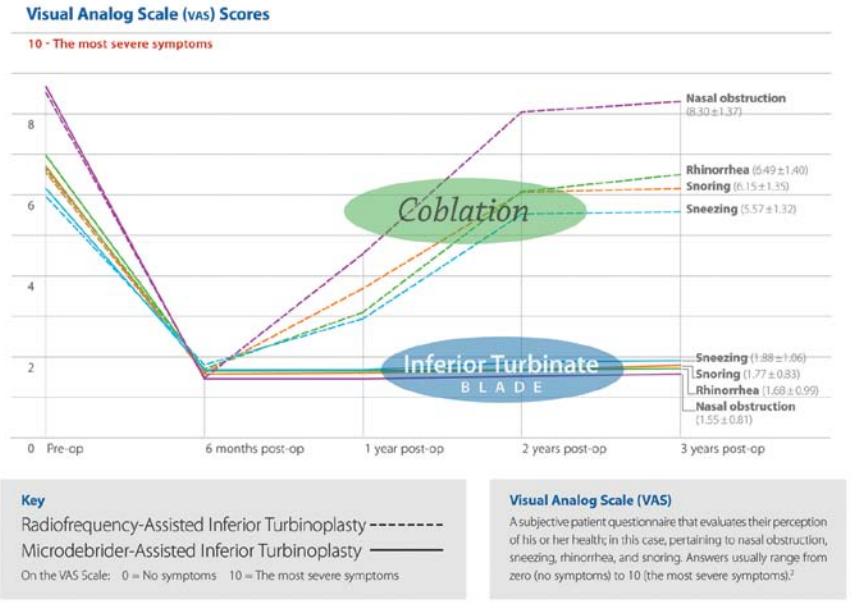
	Product No.	Description	Comments
360°	1884004HR	Tricut Sinus Blade, M4 Rotatable, 4.0 mm – 5/box	3,000 - 5,000 rpm – oscillation
360°	1883504HR	Tricut Sinus Blade, M4 Rotatable, 3.5 mm – 5/box	3,000 - 5,000 rpm – oscillation

Turbinoplasty

Clinical research has shown significantly better long-term results with powered inferior turbinoplasty.[2-7] The innovative Inferior Turbinate (IT) Blade has a patented elevator tip to facilitate insertion into the inferior turbinate and the creation of a submucosal pocket for bulk reduction. The oscillating IT blade is designed to quickly and easily debulk hypertrophied tissue within the turbinate.



Better than Coblation®

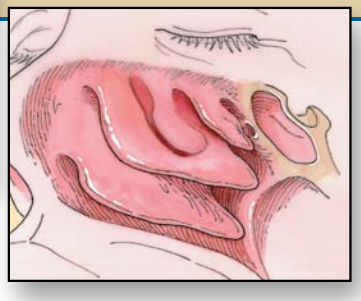


In the first three-year study directly comparing long-term efficacy of the two techniques, patients treated with Medtronic's microdebrider experienced significantly better long-term outcomes than those who received treatment with Coblation® radiofrequency.[2]

When results in the two groups were compared, none of the values for the assessed variables were significantly different at 6 months. At 1, 2, and 3 years, however, all results for both the subjective and objective variables were significantly better in the microdebrider group. Neither group experienced significant complications from surgery.

	Product No.	Description	Comments
360°	1882040HR	Inferior Turbinate Blade, M4 Rotatable, 2.0 mm – 5/box	60 - 3,000 rpm - oscillation
360°	1882940HR	Inferior Turbinate Blade, M4 Rotatable, 2.9 mm – 5/box	60 - 3,000 rpm - oscillation

Ethmoidectomy and Sphenoidotomy



One of the advantages of the Straightshot® M4 Microdebrider is being able to **use both straight and curved blades in a single procedure**.

Whether it's an anterior or total ethmoidectomy to manage chronic sinusitis or sinonasal polyps, the versatility of the microdebrider makes it possible to resect delicate ethmoidal tissue and bone to gain access to the sphenoid sinus.

The Straightshot M4 Microdebrider is frequently used in sinonasal polyposis that recur following an ethmoidectomy because it's associated with less bleeding after removal of the regrown polyps.[1]

M4 Blades with Automated EM Tracking

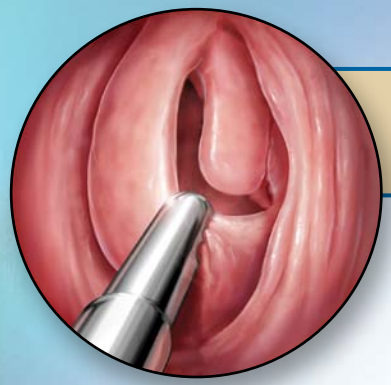
The new M4 Blades with Automated EM Tracking deliver unparalleled convenience and technology integration. They're the first and only blades that are factory-calibrated for navigation, right out of the box. Attach the blade to the M4 Microdebrider and the Fusion™ system, and start navigating.

1884012HR

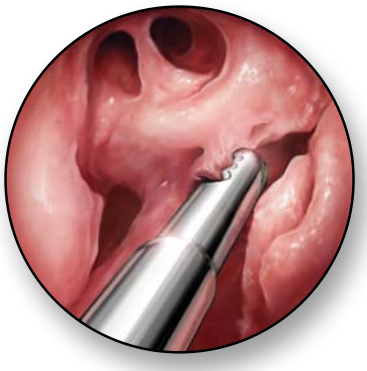
1884006EM

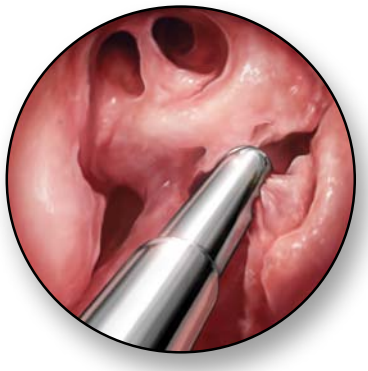
	Product No.	Description		Comments
360°	1884012HR	RAD® 12 Curved Sinus Blade, M4 Rotatable, 4.0 mm – 5/box	12°	3,000 - 5,000 rpm – oscillation
360°	1884006HR	RAD 40 Curved Sinus Blade, M4 Rotatable, 4.0 mm – 5/box	40°	3,000 - 5,000 rpm – oscillation
360°	1884016HR	RAD 60 Curved Sinus Blade, M4 Rotatable, 4.0 mm – 5/box	60°	3,000 - 5,000 rpm – oscillation
360°	1884012EM	RAD 12 Curved Rotatable Blade with Automated EM Tracking, 4.0 mm – 1/ea.	12°	3,000 - 5,000 rpm – oscillation
360°	1884006EM	RAD 40 Curved Rotatable Blade with Automated EM Tracking, 4.0 mm – 1/ea.	40°	3,000 - 5,000 rpm – oscillation
360°	1884080EM	Tricut® 13.0 cm Straight Rotatable Blade with Automated EM Tracking, 4.0 mm – 1/ea.		3,000 - 5,000 rpm – oscillation

Uncinectomy and Maxillary Antrostomy



Uncinectomy



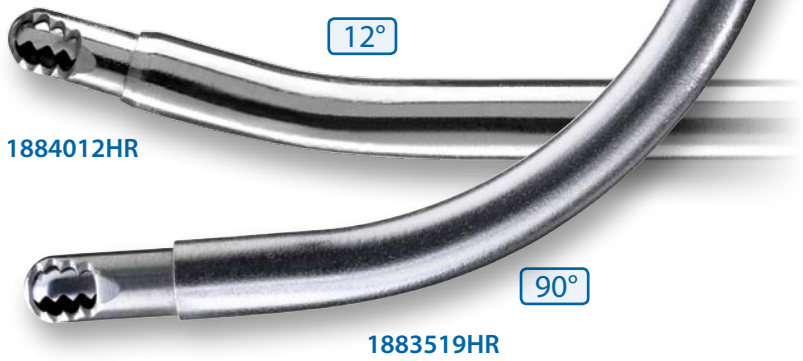


Maxillary antrostomies are made easier with the M4 rotatable blades

With the Straightshot® M4's straight or curved blades, you can perform all of the following procedures without changing equipment:

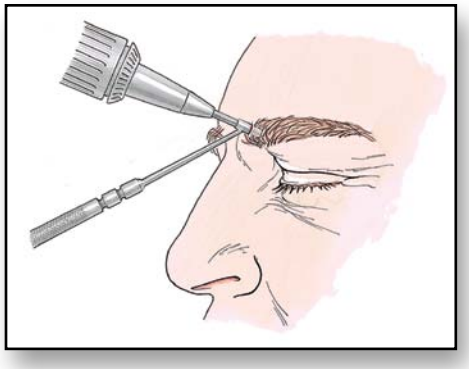
- **Delicately resect the uncinate process**
- **Open the maxillary ostium to enable visual inspection of the maxillary cavity**
- **Curved blades (40, 60, 90, and 120 degree) enable resection of polyps and/or disease as necessary**

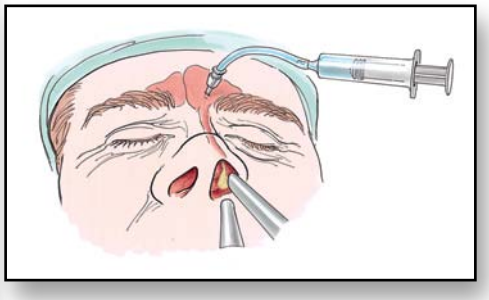
Precise resection of mucosa facilitates better healing of mucosal edges and ensures long-lasting patency.[1]



Product No.	Description		Comments
1884012HR	RAD® 12 Curved Sinus Blade, M4 Rotatable, 4.0 mm – 5/box	12°	3,000 - 5,000 rpm – oscillation
1884006HR	RAD 40 Curved Sinus Blade, M4 Rotatable, 4.0 mm – 5/box	40°	3,000 - 5,000 rpm – oscillation
1884016HR	RAD 60 Curved Sinus Blade, M4 Rotatable, 4.0 mm – 5/box	60°	3,000 - 5,000 rpm – oscillation
1883519HR	RAD 90 Curved Sinus Blade, M4 Rotatable, 3.5 mm – 3/box	90°	2,000 - 3,000 rpm – oscillation
1883517	RAD 120 Curved Sinus Blade, 3.5 mm – 3/box	120°	1,500 - 3,000 rpm - oscillation

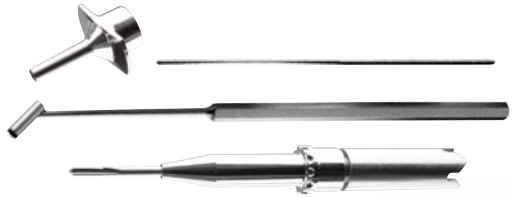
Trephination of the Frontal Sinus





Mini-Trephination Set

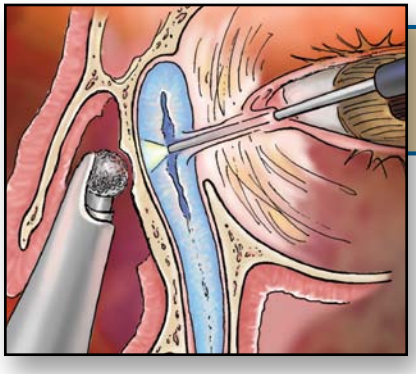
Designed for use with the Straightshot® M4 Microdebrider, the Mini-Trephination Set allows trephination through the anterior face of the frontal sinus for patients who require frontal sinus irrigation.



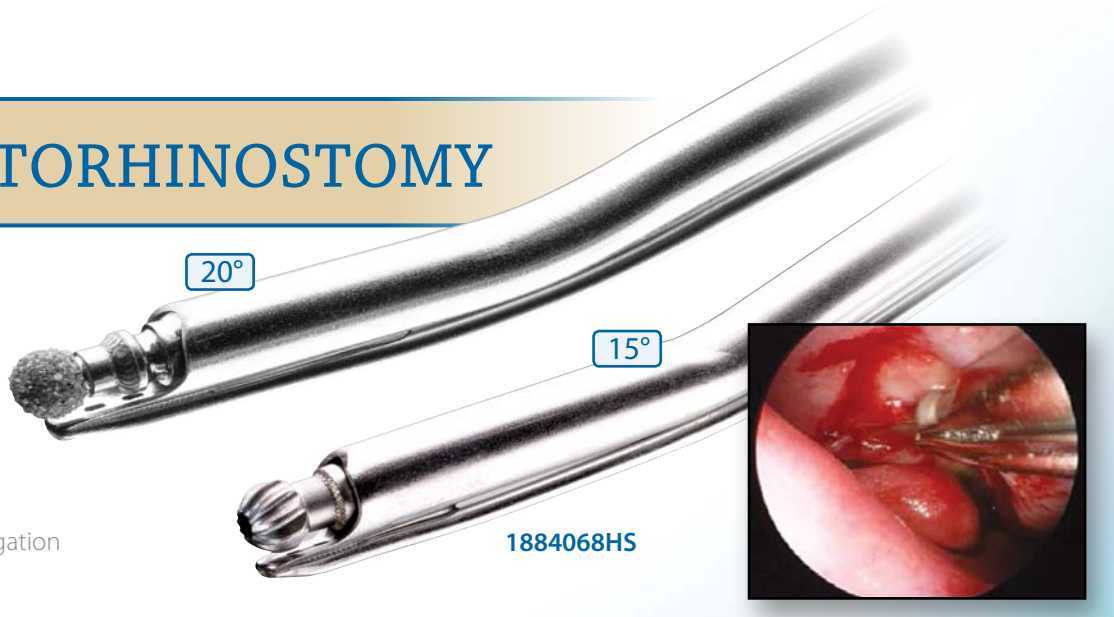
Product No.	Description	Comments
1892000*	Mini-Trephination Set – 1/box	6,000 rpm – right rotation

Set Includes:
2.0 mm Drill (1882900), Drill Guide with Skin Protector (1892001), Guide Pin (1892002), Irrigation Cannula (1892003), Instrument Tray (3717005)

**This set is only available in the USA. For customers outside the USA, please order the above items individually.*

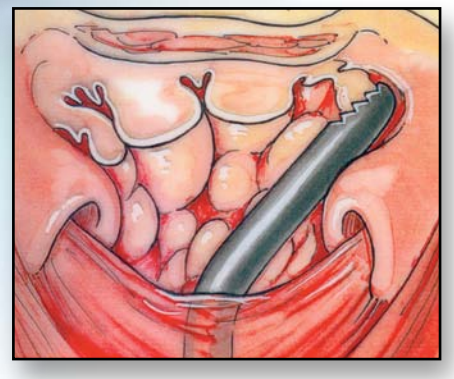


Dacryocystorhinostomy



The Straightshot® M4 Microdebrider and DCR Burs are well-suited for performing endoscopic dacryocystorhinostomy (DCR). Simultaneous irrigation and aspiration of bone debris helps maximize visibility during drilling.

Product No.	Description	Comments
1884068HS	Curved DCR Bur 15°, 4.0 mm – 3/box	Up to 12,000 rpm
1882569HS	Curved Diamond DCR Bur 20°, 2.5 mm – 3/box	Up to 12,000 rpm



Tonsils and Adenoids

Tonsil and Adenoid Blades for the PITA™ Technique *(Powered Intracapsular Tonsillectomy and Adenoidectomy)*

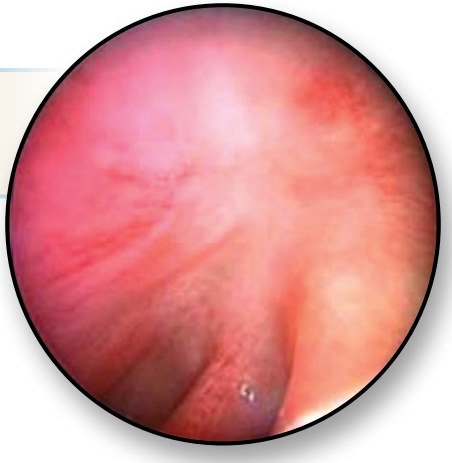
Clinical trials show that the PITA technique is safe, effective, and offers most patients less postoperative pain, a faster recovery, and a quicker return to normal diet.[8-16]

The T&A Set consists of two interchangeable blades, one curved (12°) and the other open towards the outside (40°).

1884008TA

Product No.	Description	Use	Comments
1884507	RADenoid® Adult Blade, 4.5 mm, 45° curved – 5/box	Adenoids in adults	1,500 rpm – oscillation
1884008	RADenoid Pediatric Blade, 4.0 mm, 40° curved – 5/box	Adenoids in children	1,500 rpm – oscillation
1884008TA	Tonsil (12°, 4.0 mm) & Adenoid (40°, 4.0 mm) Blade Set – 5/box	T&A	1,500 rpm – oscillation
1884013	Curved Tonsillectomy Blade, 12°, 4.0 mm – 5/box	Tonsillectomy	1,500 rpm – oscillation

Choanal Atresia



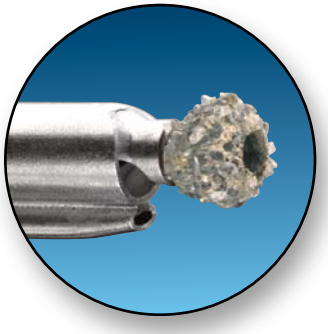
Choanal atresia in the right nasal fossa

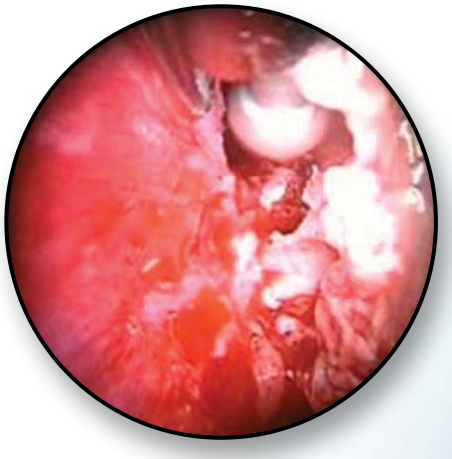
The Straightshot® M4 Microdebrider enables effective tissue reduction in simple soft tissue or complex boney choanal atresia procedures.[17-20]

1882960

1882905

1883673HS





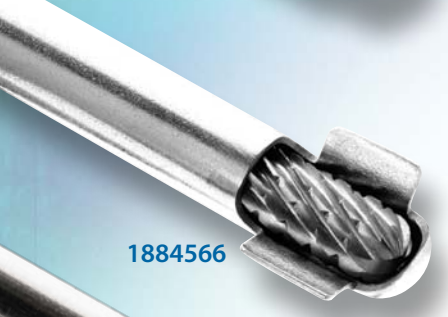
Creation of a new opening using a 2.9 mm bur

Product No.	Description	Use	Comments
1882905	Straight Conical Silver Bullet® Blade, 2.9 mm – 5/box	Pediatric	3,000 - 5,000 rpm - oscillation
1882960	Round Straight Cutting Bur, 2.9 mm – 5/box	Pediatric	5,000 rpm - oscillation
1883262HS	Round Straight Cutting Bur, 3.2 mm – 3/box	Pediatric	12,000 rpm – right rotation
1883673HS	Choanal Atresia Bur, 4.0 mm, 15° curved – 3/box	Pediatric	12,000 rpm – rotation

Septoplasty and Rhinoplasty

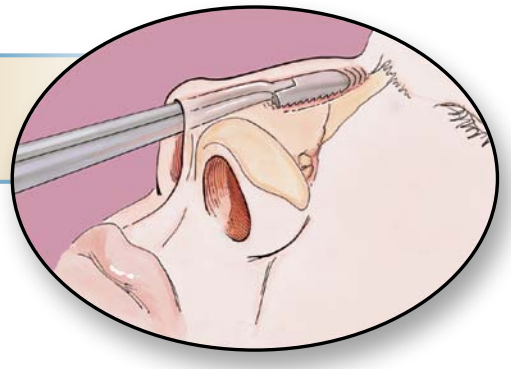
Specialty Burs

1883212HS

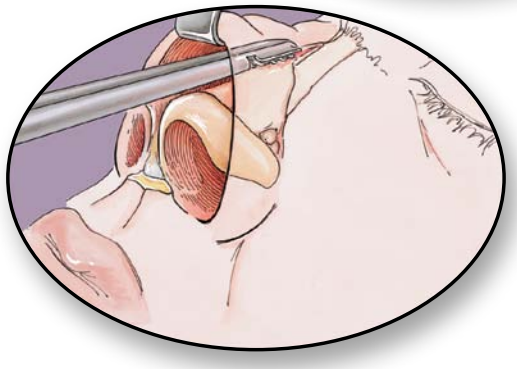


1884566

1883260



The FeatherTouch® Rasp 's unique design converts rotation to reciprocating movement, which is especially useful in rhinoplasty. This enables effortless bone removal and an appealing nasal profile.



1992208

1992210

Product No.	Description	Use	Comments
1883212HS	Septoplasty Bur, 3.2 mm, 12° Curved – 3/box	Septoplasty	12,000 rpm – right rotation
1884566	RhinoBur®, 4.5 mm – 3/box	Rhinoplasty	4,000 – 6,000 rpm – right rotation
1883260	Tardy MicroBur®, 3.2 mm – 5/box	Rhinoplasty	3,000 - 5,000 rpm – right rotation
1922005	FeatherTouch® Converter – 1/box	Rhinoplasty - hump reduction	Together with the above-mentioned rasps
1992208	FeatherTouch Rasp, Coarse (width: 8.0 mm) – 2/box		3,000 - 5,000 rpm – mounted on the above-mentioned converter
1992210	FeatherTouch Rasp, Fine (width: 8.0 mm) – 2/box		

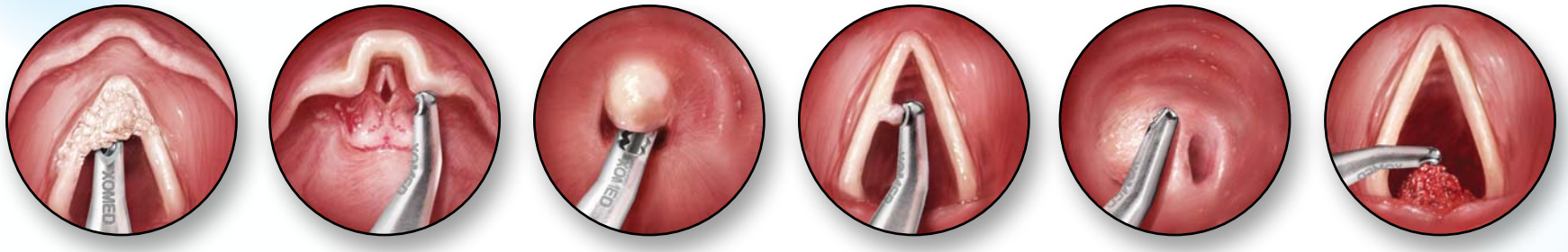
Larynx and Airways

Specialty Blades

– Papillomatosis, subglottic, and tracheal stenosis
– Polyps, edema, or tumors in the airways

With the Straightshot® M4 Microdebrider, tissue can be removed quickly and precisely to restore the airway as much as possible without compromising the larynx. The Skimmer® blade enables **safe, fast, and precise removal of airway lesions** in recurrent respiratory papillomatosis (RRP), eliminating thermal burn and other risks of laser techniques.[21]

Further indications may include unblocking of the larynx and bronchi and phonosurgery for polypoid degeneration.



Product No.	Description	Use	Comments
1882925	Skimmer® Angle-Tip Blade, 15°, 2.9 mm, L: 18.5 cm – 3/box	Larynx Papilloma	60 – 500 rpm - oscillation
1882925HRE	Skimmer Angle-Tip Blade, 15°, M4 Rotatable, 2.9 mm, L: 18.0 cm – 1/box	Larynx Papilloma	60 – 500 rpm - oscillation
1884023	Skimmer Angle-Tip Blade, 15°, 4.0 mm, L: 22.5 cm – 3/box	Larynx Papilloma	60 – 500 rpm - oscillation
1882923HRE	Skimmer Angle-Tip Blade, 15°, M4 Rotatable, 2.9 mm, L: 22.0 cm – 1/box	Larynx Papilloma	60 – 500 rpm - oscillation
1884024	Skimmer Angle-Tip Blade, 15°, 4.0 mm, L: 27.5 cm – 3/box	Larynx Papilloma	60 – 500 rpm - oscillation
1882924HRE	Skimmer Angle-Tip Blade, 15°, 2.9 mm, L: 27.0 cm – 1/box	Larynx Papilloma	60 – 500 rpm - oscillation
1884020	Straight Tricut® Laryngeal Blade, 4.0 mm, L: 22.5 cm – 3/box	Debulking	60 – 1,200 rpm - oscillation
1884030HRE	Tricut Angle-Tip Blade, 15°, M4 Rotatable, 4.0 mm, L: 22.0 cm – 1/box	Larynx Debulking	60 – 1,200 rpm - oscillation
1884031HRE	Tricut Angle-Tip Blade, 18°, M4 Rotatable, 4.0 mm, L: 27.0 cm – 1/box	Trachea Debulking	60 – 1,200 rpm - oscillation
1884033HRE	Curved Tracheal Blade, M4 Rotatable, 15°, 4.0 mm, L: 37.0 cm – 1/box	Trachea and bronchi	60 – 1,200 rpm – oscillation
1884035HRE	Curved Bronchial Blade, M4 Rotatable 4.0 mm, L: 45.0 cm – 1/box	Bronchi	60 – 2,000 rpm - oscillation

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For further information, please call Medtronic ENT at 800.874.5797 or 904.296.9600. You may also consult our website at www.MedtronicENT.com.

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