# Procedure Guidelines for **Radiofrequency RaVoR™ Surgery of the Nasal Turbinates**



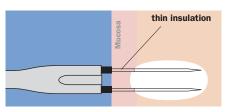


Fig. 1: Correctly placed RaVoR™ bipolar electrode: Complete insertion of the thin insulation protects the mucosa from surface lesions.

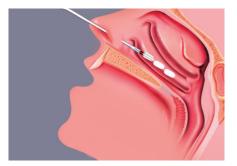


Fig. 2: Puncture sites for the application of radiofrequency energy of the inferior turbinate with RaVoR™ bipolar electrode REF: 70 44 62

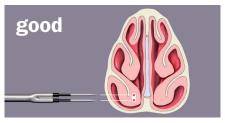


Fig. 3: Correct insertion in the middle of the nasal concha

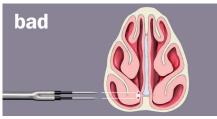


Fig. 4: Puncture too close to the nasal septum

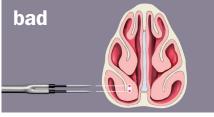


Fig. 5: Puncture too close to the bone of the nasal concha

**Disclaimer:** These procedure guidelines have been carefully researched and compiled with the help of specialist physicians. They are not meant to serve as a detailed treatment guide. They do not replace the user instructions for the medical devices used. Sutter accepts no liability for the treatment results beyond legal regulations.

#### **Indications and contraindications**

Follow the general recommendations for surgery of the inferior turbinates. There are no contraindications for RF surgery.

#### **Patient preparation**

The intervention is performed under local anesthesia on an outpatient basis. Apply a surface anesthetic (e.g. insert a cotton strip soaked in lidocaine 4 % or use a spray, optionally with a vasoconstrictor such as xylometazoline, adrenaline). Inject 2 to 3 ml local anesthetic (e.g. lidocaine 2 %) into each of the inferior turbinates.

Verify that the insulation of the bipolar electrodes is intact before using them. Do not use defective or damaged instruments to avoid the risk of burns.

#### Intervention

Thanks to the plug and operate feature, the settings for the RaVoR<sup>™</sup> treatment are automatically selected when the RaVoR<sup>™</sup> bipolar electrode is connected to the CURIS<sup>®</sup> 4 MHz radiofrequency generator. Insert the RaVoR<sup>™</sup> bipolar electrode (REF 70 44 62) completely with its thin insulation layer into the anterior head of the turbinate (medial surface) parallel to the bone (see figs. 3-5). Apply radiofrequency to the head of the turbinate. Repeat the procedure in the middle part of the turbinate and, if indicated, in the posterior third of the nasal turbinates (medial surface). To treat pronounced cases of hyperplasia of the anterior head of the turbinate a second puncture may be required.

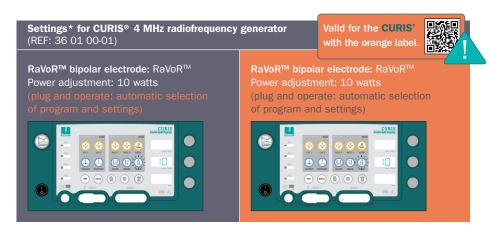
Visible changes in the mucosa are not likely. Stop applying energy if you observe a slight, white discoloring of the mucosa.



Fig. 6: RaVoR™ bipolar electrode for the inferior turbinates, single-use (REF: 70 44 62)

#### **Postoperative treatment**

Specific postoperative treatment is not required. If necessary, give pain killers (paracetamol or diclofenac). Inform your patients that the therapeutic effect will occur with a delay. In the days following surgery, nose breathing may temporarily be more obstructed due to postoperative tissue swelling. If required, prescribe nasal spray that reduces swelling (e.g. xyloetazoline).



\* Please consider that this information is not meant to serve as a detailed treatment guide. Always start with the lowest settings and adjust them accordingly.

## **Recommended products for this treatment**





Qty.	REF	Description
1	70 44 62	RaVoR™ bipolar electrode for the inferior turbinates with protective insulation, single-use, working length: 103 mm





### [REF 87 00 10] CURIS® 4 MHz radiofrequency generator basic set with single-use patient plates

Qty.	REF	Description
1	36 01 00-01	CURIS® 4 MHz radiofrequency generator (incl. mains cord, user manual and test protocol)
1	36 01 10	Foot switch two pedals for CURIS® (cut & coag), cable: 4 m
1	37 01 54L	Bipolar cable for CURIS®, length: 3 m (not shown)
1	36 07 04	Monopolar handpiece (pencil) cut & coag, shaft 2.4 mm, cable: 3 m (not shown
1	36 02 38	Cable for single-use patient plates, length: 3 m (not shown)
1 (x50)	12 80H	Patient plates, single-use, 5 x 10 pcs. (not shown)

Product availability is subject to regulatory approval in individual markets. Products may therefore not be available in all markets. Lengths for orientation purposes; may vary slightly.



PRECISION ELECTROSURGERY Made in Germany

#### SUTTER MEDIZINTECHNIK GMBH

TULLASTRASSE 87 · 79108 FREIBURG/GERMANY TEL. +49(0)761-51551-0 · FAX +49(0)761-51551-30 WWW.SUTTER-MED.COM · INFO@SUTTER-MED.DE