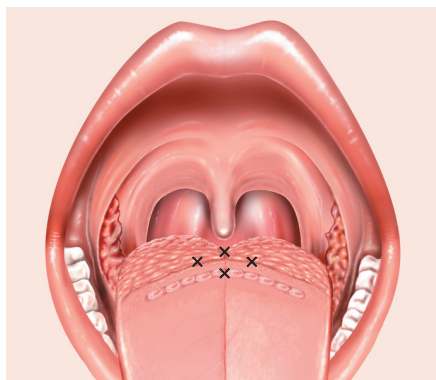
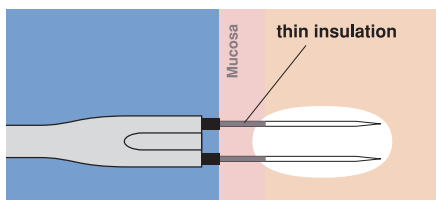


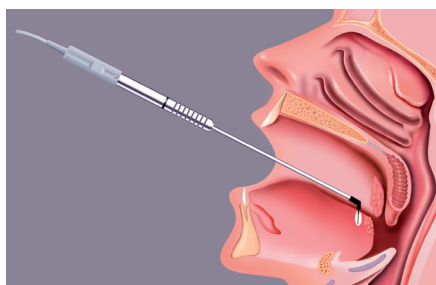
# Procedure Guidelines for Bipolar Radiofrequency RaVoR™ Surgery of the Tongue Base



**Fig. 1:** Puncture sites on the tongue base for the application of radiofrequency.



**Fig. 2:** Correctly placed RaVoR™ bipolar electrode. Complete insertion with the thin insulation layer protects the mucosa from surface lesions.



**Fig. 3:** Illustration showing the correct position of the probe in the tissue. Complete insertion with the thin insulation layer prevents surface lesions.

## Indications and contraindications

Stiffening of the tongue base for treatment of mild to moderate obstructive sleep apnea and retro lingual obstruction. There are no specifically known contraindications for RF surgery.

## Patient preparation

We recommend local anesthesia perioperative sedation with e.g. midazolame and cardiorespiratory monitoring. We also recommend perioperative intravenous antibiotics prophylaxis with e.g. cefazolin 2 gr. To administer the anesthetic apply a surface anesthetic (e.g. lidocaine spray) and inject a local anesthetic together with a vasoconstrictor (e.g. lidocaine 2 % plus adrenaline 1:200 000). Inject four times in a diamond-shaped pattern coming from median and on the level of or dorsal to the papillae vallatae (Fig. 1). Inject 2 to 3 ml of local anesthetic in each site (a total of about 10 ml).

Do not use defective or damaged instruments to avoid the risk of burns.

## Intervention of instruments

Insert the application probe (REF 70 04 99) (Fig. 3) along the anesthetized sites – in a diamond-shaped pattern and coming from median and on the level or dorsal to the papillae vallatae (Fig. 1). Pull the tongue as much forward as possible, and insert the needle with the thin insulation layer (Fig. 2). In the case of a second session, choose a different puncture site close to the first one. Insert the needle vertically if possible. There will not likely be any changes to the mucosa.



**Fig. 4:** RaVoR™ bipolar electrode for the tongue base (REF 70 04 99)

## Postoperative treatment

Specific postoperative treatment is not required. If necessary, prescribe analgetics (paracetamol or diclofenac) and continue the (oral) antibiotics prophylaxis for five days. Tell your patients that the therapeutic effect will occur with a delay. In the days following surgery, the symptoms may temporarily get worse due to postoperative tissue swelling.

**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.

**Settings\* for CURIS® 4 MHz radiofrequency generator**  
(REF: 36 01 00-01)

Valid for the CURIS® with the orange label.

RaVoR™ bipolar electrode: bipolar RaVoR™  
Power adjustment: 12 watts

**Other accessories:**  
Bipolar cable (REF 37 01 54 L)

RaVoR™ bipolar electrode: bipolar RaVoR™  
Power adjustment: 12 watts

**Other accessories:**  
Bipolar cable (REF 37 01 54 L)

\* 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



134° C  
autoclavable



**RaVoR™** (Radiofrequency Volume Reduction)

Qty.	REF	Description
1	70 04 99	Bipolar needle electrode for the tongue base with protective insulation, work length 110 mm



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

Qty.	REF	Description
1	<b>36 01 00-01</b>	<b>CURIS®</b> 4 MHz radiofrequency generator (incl. main cord, user manual and test protocol)
1	<b>36 01 10</b>	Footswitch two pedals for CURIS® (cut & coag), 4 m cable
1	<b>37 01 54L</b>	Bipolar cable for CURIS®, length 3 m
1	<b>36 07 04</b>	Monopolar handpiece (pencil) cut & coag, shaft 2.4 mm, cable 3 m
1	<b>36 02 38</b>	Cable for single-use patient plates, length 3 m
1 (x50)	<b>36 02 22</b>	Safety patient plates, single-use, packing 5 x 10 pcs. (not shown)



**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