

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

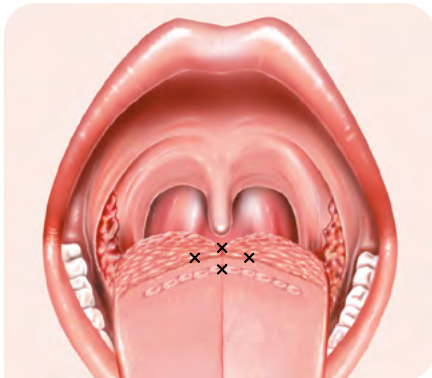


Fig. 1: Puncture sites on the tongue base for the application of radiofrequency.

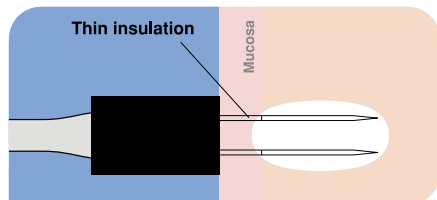


Fig. 2: Correctly placed RaVoR™ bipolar electrode. Complete insertion with the thin insulation layer protects the mucosa from surface lesions.



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 2gr. 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 44 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, single-use (REF 70 44 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.

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
(plug and operate: automatic selection of program and settings)

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For further information see back page.

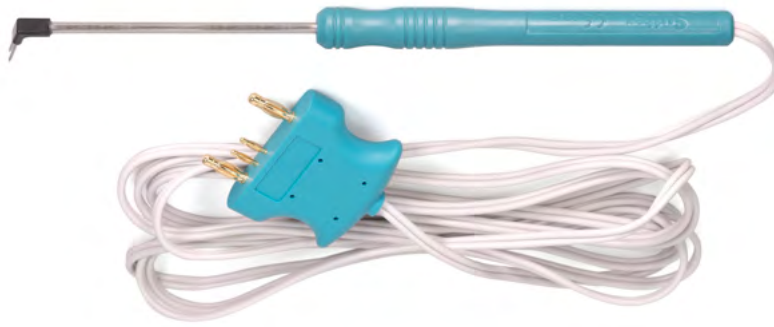


For further information see back page.

* Always start with the lowest settings to achieve the desired effects. If necessary, increase the settings step-by-step until the desired effect is achieved. This may even be 50 watts or higher. The settings may differ from patient to patient, from tissue to tissue, and have to be adjusted accordingly.

Please consider that this information is not meant to serve as a detailed treatment guide.

Recommended products for this treatment



RaVoR™ (Radiofrequency-Volume-Reduction)

Qty.	REF	Description
1	70 44 99	RaVoR™ bipolar electrode for the tongue base, working length: 110 cm



CURIS® 4 MHz radiofrequency generator
Basic Equipment

Qty.	REF	Description
1	36 01 00-01	CURIS® 4 MHz radiofrequency generator (incl. mains cord, user's manual and test protocol)
1	36 01 10	Foot switch two pedals for CURIS® (cut & coag), 4 m cable
1	37 01 54 L	Bipolar cable for CURIS®, length: 3 m
1	36 07 04	Monopolar handpiece (pencil) cut & coag, shaft 2.4 mm, cable 3 m
1	36 02 38	Cable for single-use patient plates, length: 3 m

available patient plates:

1 (x 100)	29 00-5	Single-use patient plate, split, for adults and children, PU 20 x 5 pcs.
1 (x 50)	95 80 04	Single-use patient plate, split, for adults, PU 10 x 5 pcs.
1 (x 50)	95 80 05	Single-use patient plate, split, for children, PU 10 x 5 pcs.
1	36 02 26	Re-usable rubber patient plate



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.



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