

# Procedure Guidelines for bipolar Radiofrequency Volume Reduction (RaVoR™) of the Tongue Base

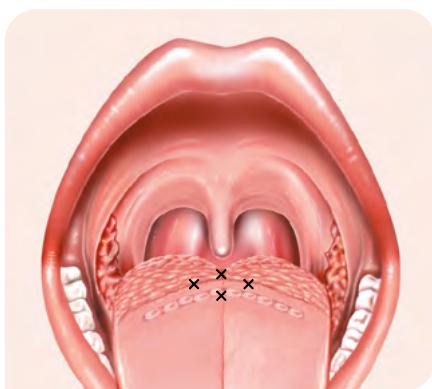


Fig. 1: Puncture sites on the tongue base for the application of radiofrequency.

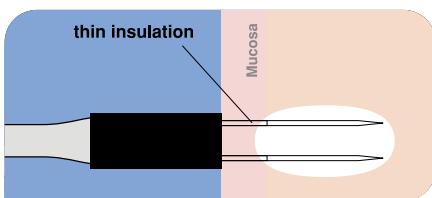


Fig. 2: Correctly placed RaVoR™ bipolar electrode. Complete insertion with the thin insulation layer protects the mucosa from surface lesions.



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. midazolam and cardiorespiratory monitoring. We also recommend perioperative intravenous antibiotics prophylaxis with e.g. cefazolin 2g. 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 3ml of local anesthetic in each site (a total of about 10ml). 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)



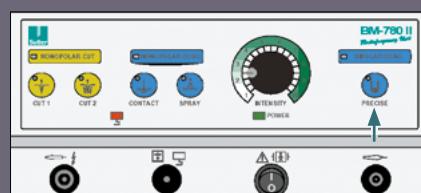
Fig. 5: Bipolar adapter  
RaVoR™ single-use (REF: 37 38 51)

## 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 BM-780 II Radiofrequency Generator (REF: 36 00 80-01)

RaVoR™ bipolar electrode: Bipolar PRECISE  
Power adjustment: 2.5 to 3.5, 15 sec.



For further accessories see back page.

\* 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



RaVoR™ (Radiofrequency-Volume-Reduction) incl. Adapter for BM-780 II



Qty.	REF	Description
1	<b>70 44 99</b>	RaVoR™ bipolar electrode for the tongue base, working length: 110 cm
1	<b>51 38 51</b>	Bipolar Adapter Sutter BM-780 II for RaVoR™ bipolar electrodes, single-use



**BM-780 II** Radiofrequency Generator  
basic set



Qty.	REF	Description
1	<b>36 00 80-01</b>	<b>BM-780 II</b> Radiofrequency generator (incl. mains cord, user manual, test protocol and instruction CD-ROM)
1	<b>36 01 05</b>	Foot switch, protection class IP X8
1	<b>37 01 38 L</b>	Bipolar silicone cable, length: 4.5 m
1	<b>36 02 18</b>	Monopolar pencil for Ø 2.4 mm shaft electrodes, cable length: 4 m
1	<b>36 02 36</b>	Cable for single-use patient plates, length: 4.5 m

### available patient plates:

1 (x100)	<b>29 00-5</b>	Single-use patient plate, split, for adults and children, PU 20 x 5 pcs.
1 (x50)	<b>95 80 04</b>	Single-use patient plate, split, for adults, PU 10 x 5 pcs.
1 (x50)	<b>95 80 05</b>	Single-use patient plate, split, for children, PU 10 x 5 pcs.
1	<b>36 02 26</b>	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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