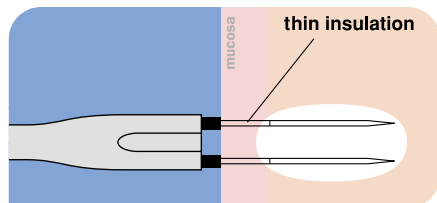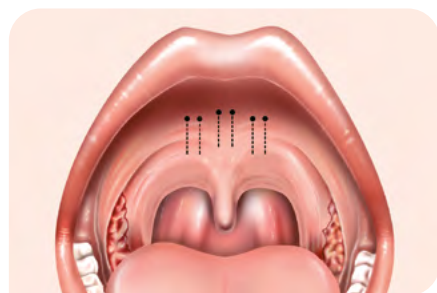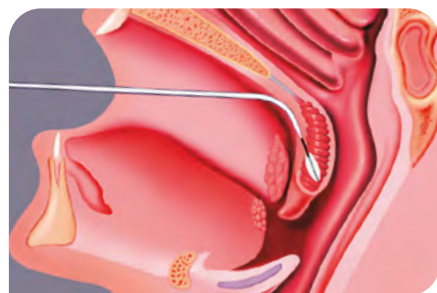# Procedure Guidelines for **Radiofrequency RaVoR™ Surgery of the Soft Palate and RF-UPP**

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 radio-frequency energy in the soft palate with RaVoR™ bipolar electrode, single-use (REF: 70 44 95)

Fig. 3: Illustration showing the correct position of the RaVoR™ bipolar electrode in the middle of the soft palate tissue

Fig. 4: Dissection of surplus uvula tissue and incision lines for the triangular excision of the posterior palatal pillars

Indications and contraindications

Palatal snoring in connection with primary snoring or mild obstructive sleep apnea, which otherwise requires no separate treatment.

Patient preparation

The intervention is performed under local anesthesia on an outpatient basis. Preoperatively 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) just behind the line between the stiff and the soft palate and at the base of the uvula (about 5 to 8 times in total). Verify that the insulation of both the monopolar and bipolar electrodes is intact before using them. Do not use defective or damaged instruments to avoid the risk of burns.

Intervention

RaVoR™ (Radiofrequency-Volume-Reduction)

Insert the RaVoR™ bipolar electrode (REF: 70 44 95) (Fig. 5) just behind the line between the stiff and the soft palate. Insert the electrode completely with its thin insulation layer (Fig 1). Administer the first puncture median and, depending on the anatomy, 1 or 2 applications laterally to the right and left (Fig. 2).
Insert the needle into the middle of the soft palate tissue to avoid lesions of the oral and pharyngeal surfaces of the palate (Fig. 3). Visible changes in the mucosa are not likely. Stop applying energy if you observe a slight, white discoloring of the mucosa. In the case of a second session, choose neighboring puncture sites and do not insert the probe in the same place.

Uvula resection

If the uvula and the posterior palatal pillars have excess mucosa tissue (webbing), dissect the surplus mucosa with a cutting electrode (ARROW*tip*™ monopolar microdissection electrode REF: 36 44 42). Be careful to avoid lesions of the uvular muscles and the palatal pillars when cutting away excess mucosa tissue and making a triangular excision to remove surplus tissue of the posterior palatal pillar (Fig. 4).

Fig. 5: RaVoR™ bipolar electrode for the soft palate, single-use (REF: 70 44 95)

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Fig. 6: Bipolar adapter for RaVoR™ single-use (REF: 37 38 51)

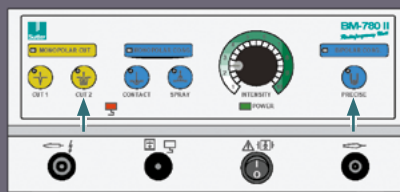Fig. 7: ARROW*tip*™ monopolar microdissection electrode, single-use (REF: 36 44 42)

Postoperative treatment

Specific postoperative treatment is not required. If necessary, prescribe analgetics. The pain might be stronger if it had been necessary to dissect excess mucosa. Inform your patients that the therapeutic effect will occur with a delay. In the days following surgery, snoring symptoms may temporarily be more pronounced 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 to 3, 🕐 9 sec.
ARROW*tip*™ monopolar microdissection electrode: Monopolar CUT 2
Power adjustment: 2.5

For further accessories 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) incl. Adapter Sutter BM-780 II

Qty.	REF	Description
1	**70 44 95**	**RaVoR™** bipolar electrode for the soft palate, single-use working length: 103 mm
1	**37 38 51**	Bipolar adapter Sutter BM-780 II for RaVoR™ bipolar electrodes, single-use

ARROWtip™ monopolar microdissection electrode

Qty.	REF	Description
10	**36 44 42**	**ARROWtip™** monopolar microdissection electrode, single-use total length 105 mm

BM-780 II Radiofrequency Generator
Basic Equipment

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