# Surgical procedure of APrevent<sup>®</sup> VOIS



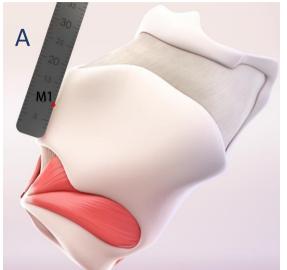
- 1. Allocation of key points
- 2. Outline the rectangular window
- 3. Marking, drilling and trimming the window

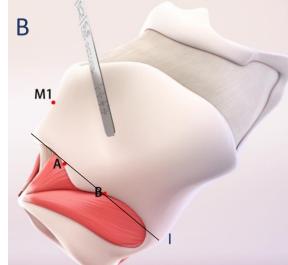
Ε

4. Insert the VOIS implant

# 1. Allocation of key points

- A. Find "M1", midpoint of anterior thyroid cartilage border
- B. Find inferior tubercle, define the points "A", "B" and inferior border line "l"



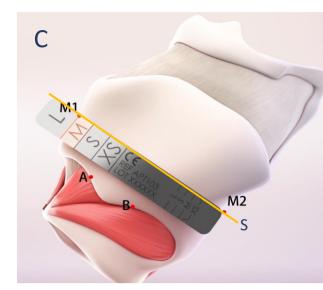


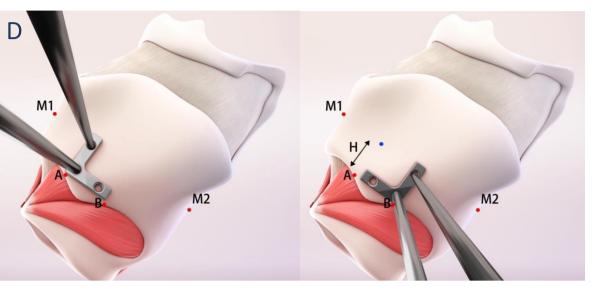
E. Distance "D" is specific to each implant size and is measured with APT105/106 instruments (see table below)

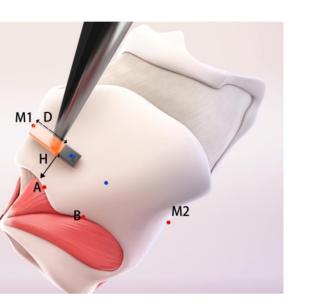
M1M2/Distance S	Implant size	Distance D
28-33mm	X-Small	7mm
33-38mm	Small	10mm
38-42mm	Medium	8mm
>42mm	Large	12mm

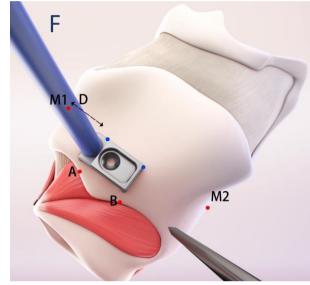
F. Cross distances "D" and "H" to define the location of window

- C. Find "M2", posterior thyroid cartilage border, then define superior line "S" passing through "M1" and "M2", running parallel to the inferior borderline "I", followed by defining the implant size with the thyroid cartilage ruler APT103 by length "S".
- D. Use the APT104 instrument to define the upper margin of the window and line "H"



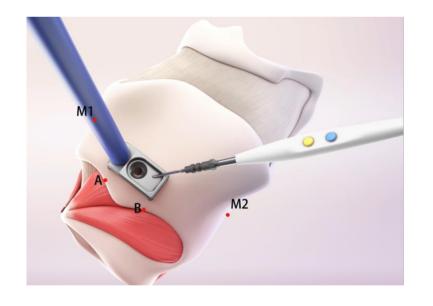






#### 2. Outline the rectangular window

 A. An 11 x 6mm rectangular thyroplasty window is outlined using the APT107 "Window Outline Template" with low-energy electrocautery.



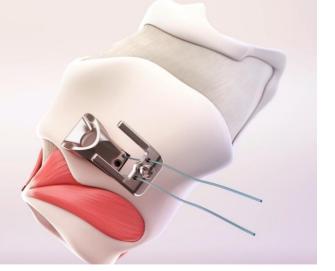
### 3. Marking, drilling and trimming the window

- A. Mark and drill out an 11x6mm rectangular window.
- B. APT113 "window size checking gauge" is applied to confirm the accurate size of the window.
- C. After careful mobilization of the endolaryngeal tissue, an "implant checking gauge" is used to test the fitting of the implant titanium housing into the window.



#### 4. Insert the VOIS implant

A. Before implantation, check if the balloon is functional.B. The implant is inserted. The fixation-plate is then slid along the suture-loop down to the posterior part of the thyroplasty window.

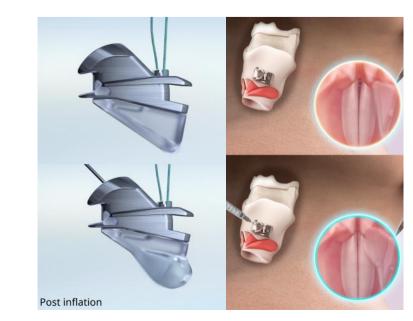


C. Fixation plate is screwed clockwise to firmly secure the implant on the thyroid lamina. After screwing, the sliding suture is knotted and cut.

D. If applicable, inject normal saline as needed. ATTENTION! Never exceed the recommended "maximum filling

# **Adjustability**

Implant Size	Maximal Filling Volume
X-Small	0.17ml
Small	0.25ml
Medium	0.30ml
Large	0.30ml



• Before further saline solution is injected into the implant, the filling volume in the implant "MUST" be completely removed.

• Puncture the port membrane with a 24G needle connected to a 1ml syringe filled with the implant-specific "maximum filling volume" of saline.



• Inject the desired amount under phonatory and / or endoscopic control.

#### • The balloon expands and closes the glottic gap.