STENING[®]

Tracheobronchial Stent

Code: ST



The Stening[®] Tracheobronchial stent is the classical and straight stent for tracheal and bronchial affections. It has a tubular structure, with flat surface anchoring studs on its outer wall to prevent stent migration.

Indications

- Primary or secondary bronchial/tracheal neoplasms
- Tracheoesophageal fistula
- Bronchial/tracheal rupture
- After laser resection, cryotherapy or electrocautery, to maintain the airway opened
- Extrinsic compression or commitment of the submucosa
- Post-intubation stenosis
- Post-traumatic stenosis
- Post infectious stenosis (endobronchial tuberculosis, histoplasmosis mediastinal fibrosis, herpes virus, diphtheria)
- Post inflammatory stenosis: Wegener's disease
- Focal trachea-broncho-malacia: following tracheostomy or radiation therapy
- Diffuse trachea-broncho-malacia: idiopathic, polychondritis or Mounier-Kuhn syndrome
- Tracheal/bronchial tumors
- Amyloidosis
- Excessive dynamic compression of the airway
- Postsurgical term-terminal bronchial anastomosis stenosis
- Broncho-malacia
- Bronchus invasion caused by an esophageal carcinoma
- After endoscopic resection of bronchial metastasis

Miscellaneous

- Extrinsic compression caused by an aortic aneurysm
- Tracheal distortion caused by kyphoscoliosis
- Tracheal obstruction caused by an esophageal stent
- In combination with an esophageal stent

How to Use:

Introduction technique: the procedure will be carried out under general anesthesia.

The implant of these type of prostheses can be performed directly through the work channel of the tracheoscope or bronchoscope. A conventional introducer for silicone prostheses can be used as well. A rigid endoscope will be used to access the airway.

The length and diameter of the area that the stent will cover must be established correctly. If you want to know the length of the area, you can mark the endoscope when its extreme is located at the end of the injury. Repeat the process once the tracheoscope is moved up to the beginning of the injury. The diameter of the trachea or bronchi must be estimated by comparing it with the diameter of the endoscope used.

Retrograde mode of Implant:

- 1. Lubricate the introducer nozzle with lidocaine gel, preventing the lubricant from reaching the operator's fingers.
- 2. Fold the Stening[®] over its axial axis and put it inside the prostheses introducer through its nozzle.
- 3. Remove the nozzle.
- 4. Pass the injured area with the bronchoscope tube and locate its distal end or bevel on the healthy mucosa, exceeding the affected area by 5 to 7 mm.
- 5. Place the introducer inside the endoscope.
- 6. Press the ejector while extracting the endoscope in equal measure in which the plunger progresses inside. The prosthesis will be released. If necessary, it can be accommodated with an alligator forceps. The maneuver is simpler if the stent is "lower" than the lesion.

Antegrade mode of implant: steps 1, 2 and 3 will be repeated.

Stop the endoscope containing the introducer and prosthesis 5 mm before injury. Then slowly press the ejector plunger. In this way the prosthesis will advance inside the area to be treated. When the stent starts to abandon the endoscope interior you will feel a small reduction of the resistance in the pressure performed on the plunger.

A prosthesis loader can be used to propel the stent through the interior of the endoscope, or the method that the operator deems appropriate.

Correction of the stent position: the stent may require additional maneuvers in order to correct or adjust its final position. It is preferable to correct a stent that has been released beyond the desired position. It is highly inconvenient to advance a prosthesis that has been released before the lesion to be treated.

To move a stent in a proximal way it has to be taken by its edge with an alligator forceps and then you must pull with kindness. To be more accurate we recommend this maneuver: take the stent by its edge. Then, advance with the optical vision through the stent until you see its distal end. Now pull the forceps and you will be able to see how the stent ascends through the airway.

Stop pulling when you consider that the position is correct.

Extraction technique: the intubation will be carried out with a rigid endoscope.

The stent must be taken by its edge with an alligator forceps, with enough steadiness. Rotate the forceps 360° so the stent folds on itself taking an omega shape and loses its radial resistance to compression. Next, pull the forceps by removing the prosthesis together with the endoscope. You can insert the proximal end of the stent into the endoscope. This way, the vocal cords are protected during the extraction.

Other implant and removal methods are also possible depending on the experiences and preferences of the surgeon.



STENING®

Cares:

- Maintain the moisture of secretions whenever they appear, by taking nebulizations • frequently with a warm isotonic saline solution
- Perform a periodic check-up following your doctor's advice
- Take care of your oral hygiene and treat cavities

Features

- Medical grade silicone •
- Bevelled edges to prevent granulomas • •
- Spur system to prevent migration
- Removable •
- Surface of maximum softness to avoid adherence of secretions •
- Transparent or Radiopaque •



References		Dimensions (mm)		
Translucent	Radiopaque	Diameter (D)	Length (L)	Wall thickness (W)
ST05	STX05	5	50	0.5
ST06	STX06	6	50	0.5
ST07	STX07	7	50	0.5
ST08	STX08	8	50	0.5
ST09	STX09	9	50	0.5
ST10	STX10	10	20, 30, 40, 50, 60, 70, 80	1
ST11	STX11	11	20, 30, 40, 50, 60, 70, 80	1.1
ST12	STX12	12	20, 30, 40, 50, 60, 70, 80	1.2
ST13	STX13	13	30, 40, 50, 60, 70, 80	1.5
ST14	STX14	14	30, 40, 50, 60, 70, 80	1.5
ST15	STX15	15	30, 40, 50, 60, 70, 80	1.5
ST16	STX16	161/4	30, 40, 50, 60, 70, 80	1.5
ST17	STX17	17 ^½	30, 40, 50, 60, 70, 80	1.5
ST18	STX18	18	40, 60, 80, 100	1.5
ST20	STX20	20	40, 60, 80, 100	1.5

Stening® provides detailed instructions for use with each device, including insertion and removal techniques, precautions, and postoperative care.

For custom made devices you can contact us

A radiopaque device can be white or pale yellow.

Due to the characteristics of the production process, the sizes of the devices may vary by +/- 2%

Warning: the product should not be reused because this can cause cross contamination.





