

# VAC-Stent placement

## ENDOSCOPIC

### Nettoyage and inspection defect

#### Indication for VAC-Stent:

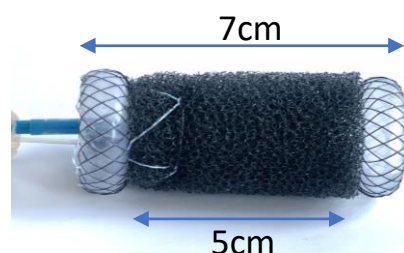
Defects in the upper gastrointestinal tract with indication for endoscopic vacuum therapy.

#### Contra-indications for VAC-Stent:

- Defect >5cm in length (due to sponge length);
- Contaminated extra-luminal cavity;
- Narrow esophagus ( $\varnothing$  body 14mm,  $\varnothing$  flange 30mm);
- Distance to UES <3cm (when placement is too proximal, removal can be very challenging);
- Leakage of cervical anastomosis

### Positioning

With positioning, consider the length of the VAC-Stent and sponge part in relation to the defect. This is a distal release system.



### Securing VAC-Stent position

When deploying the VAC-Stent, keep an eye on the position and reposition if necessary. Since it is a distal release system, it is better to deploy the stent slightly more distally. Retracting the deployed stent is easier than pushing it inwards if it ends up too proximal.

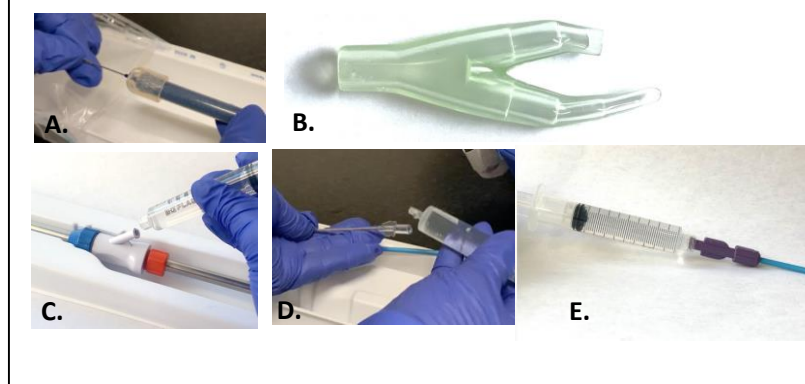
### Securing the VAC-Stent

Secure the blue suction catheter of the VAC-Stent at the mouth once the system has passed beyond it.

### Consider PPI

When the VAC-Stent covers the cardia, initiate PPI 40mg 2 times daily

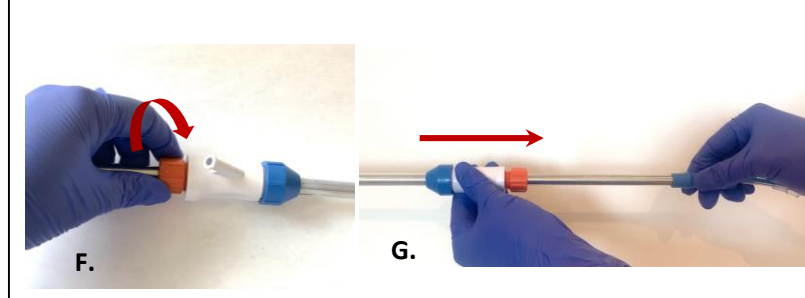
## Preparation



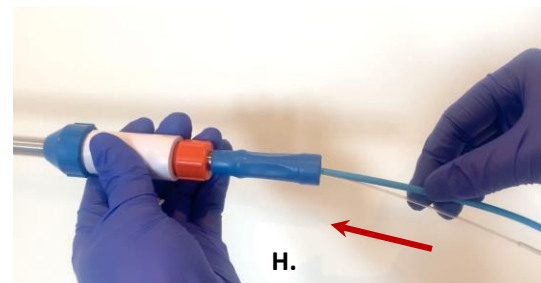
## VAC-Stent placement

- Placement of guidewire
- Advance the VAC-Stent system over the guidewire
- Gently guide the VAC-Stent system into the esophagus (if necessary, using a jaw thrust)
- Reintroduce the endoscope
- Position the VAC-Stent with endoscopic visualization: make sure the sponge part covers the defect

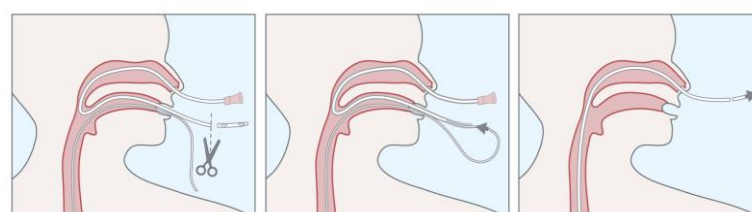
## VAC-Stent deployment



## Removing the VAC-Stent system



## Guiding the catheter to exit the nose



## Final steps



## OUTSIDE OF PATIENT

### Preparing the VAC-Stent

**Materials:** VAC-Stent, Y-shaped connector, guidewire 0.035mm, 20cc syringe, grasping forceps, distal attachment cap, connected suction catheter

- (A) Remove the steel wire  
 (B) Retain the provided Y-connector  
 (C) Flush the sponge lumen with 40cc  
 (D) Flush the guidewire lumen with 20cc  
 (E) Flush the blue catheter with 20cc, remove the purple connector and store securely

### VAC-Stent over guidewire

The opening for the guidewire on the VAC-Stent system is located on the transparent cap at the end.



### Securing the guidewire

Ensure that the guidewire is securely fixed in place and remains in position

### Deploying the VAC-Stent

- (F) Loosen the orange cap by half a turn  
 (G) Secure the end of the VAC-Stent system and slowly move the orange cap towards the end: this may initially feel somewhat resistant.

### Removing the VAC-Stent system

(H) Once the stent is deployed, the VAC-Stent system and the guidewire can be removed, while ensuring that the blue VAC-Stent catheter remains in place.

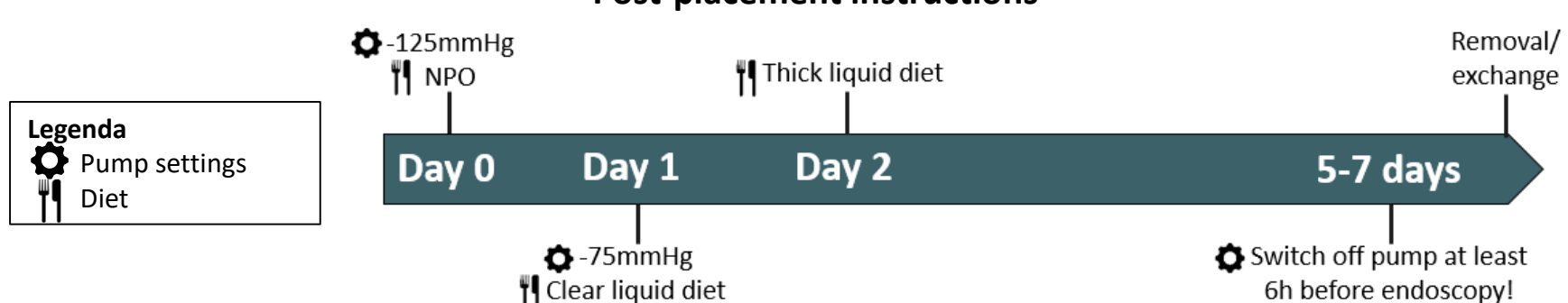
### Fixation of VAC-Stent catheter

Fix the blue VAC-Stent catheter to the nose.

### Connection to vacuum pump

(I) Slide the purple connector back onto the blue catheter and cut the tube at an angle. Connect the VAC-Stent to the vacuum pump using the Y-shaped connector. No additional patches are required! Turn on the vacuum pump at -125 mmHg.

## Post-placement instructions



**On the ward:** flush 3 times per day via purple connector with 20cc water (keeps the system open and prevents ingrowth).

# VAC-Stent removal

## ENDOSCOPIC

### Preparation

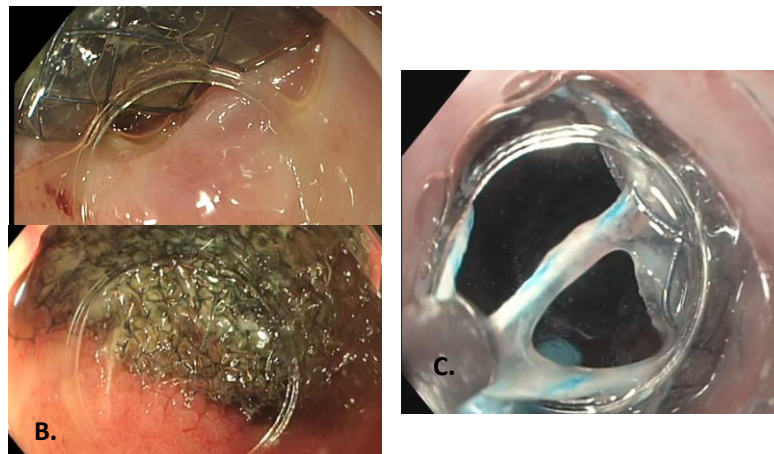


### Loosening the VAC-Stent

**(B)** Maneuver the endoscope with a tapered hood distal attachment cap between the VAC-Stent and the mucosa. It may be helpful to first loosen the stent by pulling the blue strings with grasping forceps. Gently push the VAC-Stent away from the mucosa using the endoscope, moving from proximal to distal.

**(C)** When the VAC-Stent is loose on all sides, grasp the blue string with forceps on two contralateral sides or on one side at 7 o'clock and pull it back into your working channel. Once the VAC-Stent is completely loosened, it can be removed with the endoscope. Do this while gently pulling the blue catheter out of the nose simultaneously.

### VAC-Stent removal



### Defect inspection

Inspect the defect site and determine whether a new VAC-Stent should be placed. If there is endoscopic uncertainty about the closure of the defect, a new VAC-Stent can be placed or a CT-scan with oral contrast can be done.

### Final steps

## OUTSIDE OF PATIENT

### Disconnection of VAC-Stent

**(A)** Disconnect the blue VAC-Stent catheter from the Y-shaped connector and remove the nose plasters.

### Materials

- Tapered hood distal attachment cap
- Grasping forceps
- Suction catheter connected and closeby!

### New VAC-Stent (if necessary)

If the defect is not yet closed, the endoscopist will determine whether a new VAC-Stent should be placed. If so, the new VAC-Stent can be prepared as described in 'VAC-Stent placement'.

### Post-removal instructions

In case of doubt about closure of the defect, a CT-scan with oral contrast can be performed.  
When the defect is closed, gradually increase the intake.