

Featuring new Jennie's™  
Anesthesia Suction



The better way to operate™

GEISTER



Original Bugge™  
Suction Tubes

# Jennie's™



**This suction has been specially developed in order to reduce the risk of aspiration into the lungs during intubation.**

Far from all patients have an empty stomach when intubation is needed. One example is in emergency cases like after trauma, cardiac arrest, stroke, caesarian section, or similar situations when patients loose consciousness and need to be intubated immediately. Another example is operation on patients with ileums. After several hours of partial or complete obstruction in the guts, large volumes of liquid can regurgitate to the stomach. If such liquid is vomited in connection with intubation procedures and aspirated into the lungs, a very dangerous situation will be created. Since such liquid often contains gastric acid, gall juice and pancreatic enzymes, the lungs could be damaged for days or weeks, and in addition, the anesthesiologist cannot survey the intubation area. Intubation could be delayed or made wrongly, with the tube ending up in the esophagus, making the situation even worse.

**With Jennie's™ suction the intubation act becomes different and easier.** After giving induction drugs, anesthesia level can be checked in the usual way by observing the eye reflexes. Once you feel convinced that the patient is ready for intubation, you first of all put down your Jennie's™. If reflexes of the hypopharynx are gone, the patient will tolerate the suction head. If not, retract the suction and wait a few seconds and maybe adjust the drugs. Then a new try with the suction can be made. Once it is tolerated, you know for sure that it is time to intubate, and that the intubation area is now empty.

If juice and may be also solid particles should regurgitate from the stomach while intubating, the Jennie's™ will suck out the liquid part of it directly and intubation can be achieved in a few seconds. When the tube is cuffed, you will feel safe. Ventilation is secured and hypopharynx is emptied of liquid. Solid particles can be removed once the situation is under good control. Leave the suction in place until you have full control ex when a gastric tube has been inserted and is working.

When all compartments are empty you can remove the suction.

In desperate situations when intubation is difficult or impossible and you need to ventilate the patient on a mask, leave the suction in the hypopharynx. If liquid should appear, it will be eliminated automatically and it can be observed in the plastic suction tube leading to the reservoir. The loss of oxygen by the continuous suction with the Jennie's™ is limited compared to the total ventilation volume, but should be compensated by increasing the total ventilation accordingly.

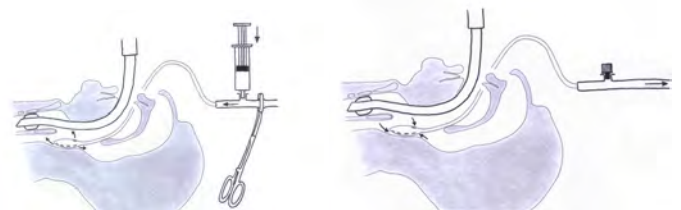
It is recommendable not to leave the Jennie's™ in the hypopharynx for long time use without observation. Even if it is designed in a way not to stick to the tissue (especially to the back wall of the hypopharynx), one can never be completely sure what happens in an area that cannot be seen. When the Jennie's™ is in use, it is advisable to move it around a little bit in regular intervals in order to check its normal function by listening to the suction noise and by inspecting the suction tube. If the suction head is freely movable, normal function can be presumed.

Do not increase suction force to extreme levels. Normal vacuum is enough. If anything strange should be suspected, disconnect the suction tube and remove the Jennie's™ slowly. Then make a final inspection of the intubation area with a laryngoscope.

Never use any force when manipulating the suction. Insert and withdraw it gently and slowly. The normal saliva will lubricate the head and the shaft of the device. No force at all is needed to move the suction up or down.

Since the shape of the Jennie's™ suction is similar to the shape of the Magill clamp, every person with a certain anesthesiologic training should feel comfortable with this unique new instrument in his hand and will automatically find the natural way up and down the throat of the patient.

Mogens Bugge, MD PhD  
Sahlgrenska Hospital, Gothenburg/ Sweden



**The Jennie's™ suction can also be used to flush the throat:**

With the Jennie's™ suction in place and the patient intubated, saline can be flushed down through the suction tube. 20 ml seems an appropriate volume. As soon as the saline has been flushed down, suction is applied and the liquid gets back out in a few seconds. The suction procedure can be repeated more than once and some type of cleansing liquid can also be added to the saline if indicated. A culture from the liquid collected can then be achieved if desired.

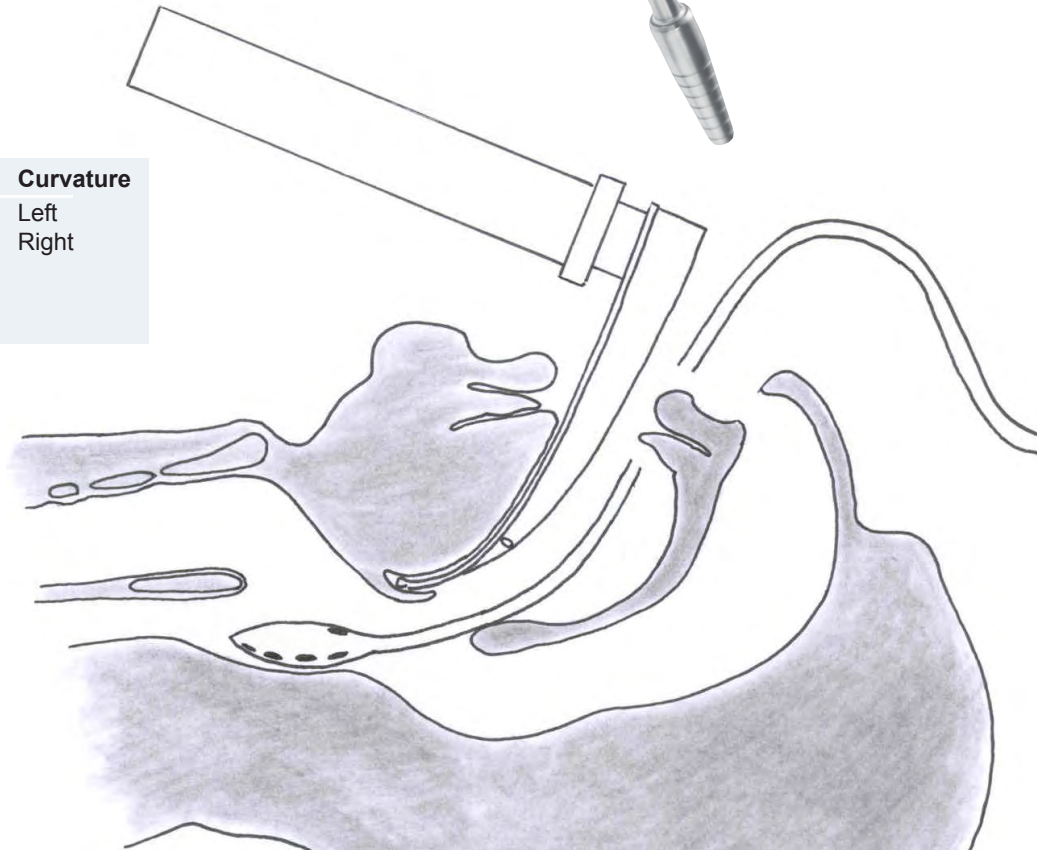


18-0410R

18-0410L

Art.-No.	Ø	Length	Curvature
18-0410L	6 mm	23 cm / 9"	Left
18-0410R	6 mm	23 cm / 9"	Right

Includes:  
18-0410.CA Screw-on Cleaning Adapter



18-0410.CA

Screw-on cleaning adapter





This unique suction handle consists of two tubes within each other. The external tube has multiple holes leading the liquid downwards between the two tubes to the tip of the inner tube where the active suction point is located.

The suction handle is available in 4 sizes, a small model (18-0404) mainly for cardiac operations, and a large model (18-0400) primarily constructed to empty the pleural cavity. Additionally a medium model for smaller adults and a mini model for children is available. The tubes can easily be taken apart for cleaning and sterilization. The suction is easily connected to a 1/4 inch tube or to a 3/8 inch tube over a conical connector. It is flattened on the inside of the handle and curved. Therefore it is easily introduced and passes behind organs (heart, lung, liver, spleen, uterus etc.) and surrounding tissue without damage to the organ. It also serves as a hand-held retractor.

Possible applications:

**Open heart surgery:** eliminating free floating visible blood in the pericardium.

**Aortic valve surgery:** keeps the left ventricle empty at the same time as the aortic root is visualised properly. Also for irrigation of the inside of the aortic root with saline.

**Mitral valve surgery:** placed with the tip at the bottom of the left atrium it keeps the field dry. The assistant can use the handle to present the surgical field to the surgeon with a slight traction. The handles also help for inspection of the left or right ventricle.

**Repair of bleeding on the backside of the heart:** suction of blood from the pericardium simultaneously. The suction handle is simply laid down on the bottom of the pericardial sack during the repair.

**Repair on the backside of the ascending aorta:** the handle can be held by the assistant and the aorta is slightly lifted to keep the field empty of blood and view free.

**Aortic aneurysm surgery:** especially when ruptured, extensive suction force is needed. By inserting two large suction handles, one in each pleura, 5 litres /minute can be sucked out and the field can be controlled until a proper venous cannula can be applied.

**Operating on the aortic arch:** the handle can be inserted into the arch while inspecting the inside for tears and be running while a graft is sutured to the arch. In such situations when circulatory arrest is actual, and time is precious, perfect suction is mandatory which standard suction handles most of the time do not offer, especially not in revision cases where connective tis-

sue continuously obliterates the suction openings and the tip sticks to the tissue.

**Approaching aneurysms by thoracotomy:** the same situation as mentioned above is a problem which can be easily controlled with a curved large suction handle in the bottom of the thoracic cavity.

**Aneurysms in the abdomen:** when opening the abdomen, visibility may be poor due to bleeding. A large curved suction tube is applied at the lowest point.

**Embolectomy on the pulmonary artery:** The pulmonary artery is opened on its ascending segment and major lumps of thrombus material are taken out to begin with. Thereafter the surgeon wants to inspect deeper out in the pulmonary artery at the same time as he wants to eliminate debris. The curved small suction handle may be of good help here especially since it does not stick to the tissue of the pulmonary artery. It is also possible to flush with saline.

**Late tapenades of the pericardium:** the curved suction handle can easily be inserted high up on both sides of the heart and also on the backside of the heart in order to get all blood out. When irrigating the pericardium with warm saline the suction handle is still located within the pericardium until the liquid coming out looks clean.

**Reoperation for bleeding after heart operations:** the bottom of the pleura can be easily reached with the large suction handle.

**Pleural empyema:** drainage of the infected pleural fluid.

**Perioperative autotransfusion during off-pump surgery:** blood can be sucked directly to a reservoir and transfused to the patient. Suction force must be kept down to low levels to minimize trauma to the blood.

The suction tube may also be useful for **abdominal surgery**, e.g. during liver transplantation, in operations in the abdominal pelvis on the urinary bladder and prostate and during caesarian section.

Art.-No.	Ø	Length	Size
18-0400	12 mm	29 cm / 11 1/2"	Large
18-0402	10 mm	29 cm / 11 1/2"	Medium
18-0404	8 mm	20 cm / 8"	Small
18-0406	6 mm	20 cm / 8"	Mini
18-0408	4.5 mm	20 cm / 8"	Micro (Pediatric)

Developed in cooperation with Mogens Bugge, MD PhD, Sahlgrenska Hospital, Gothenburg, Sweden



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