Tracheal or Bronchial Stent Placement

Many diseases or disease complications can narrow or block your airway, causing you to feel short of breath. A stent is a hollow tube that may be placed in your airway to open the narrowed area and help you breathe (see Figure 1).

The stent can be placed in either your trachea or your bronchi, depending where the narrow area is. The trachea is the tube that carries air from your nose and mouth into your lungs. The bronchi are tubes that branch off the trachea and lead to different areas of your lungs (see Figure 2).

Stents can be made of different materials, including metal or silicone. They also come in different sizes and shapes. They can be temporary or permanent. A computed tomography (CT) scan will help your doctor decide which type will
Your stent will be placed during a procedure called a bronchoscopy, which uses a flexible camera inserted though your mouth. You will not have a surgical cut. Most people go home the same day.

![Figure 2. Your airway](image)

**Before Your Procedure**

**Presurgical testing**

Before your procedure, you will be given an appointment for presurgical testing (PST). During your PST appointment you will meet with a nurse practitioner who works closely with anesthesiology staff (doctors and specialized nurses who give you medication to sleep during surgery). You can eat and take your usual medications the day of your PST appointment.

During your appointment, your nurse practitioner will review your medical and surgical history with you. You may have tests, including an electrocardiogram (EKG) to check your heart rhythm, a chest x-ray, blood tests, and any other tests necessary to plan your care. Your nurse practitioner may also recommend you see other healthcare providers.

Be sure your nurse practitioner and your doctor know all of the medications you’re taking. If you take medication to thin your blood, such as to treat blood clots or to prevent a heart attack or stroke, ask if you should stop taking it. Some examples are aspirin, warfarin (Coumadin®), dalteparin (Fragmin®), heparin,
tinzaparin (Innohep®), enoxaparin (Lovenox®), clopidogrel (Plavix®), and cilostazol (Pletal®). Do not stop taking these medications without talking with your doctor.

It is very helpful if you bring the following with you to your PST appointment:

- A list of all the medications you’re taking, including patches and creams.
- Results of any tests done outside of MSK, such as cardiac stress test, echocardiogram (ECG), or carotid doppler study.
- The name(s) and telephone number(s) of your doctor(s).

**Arrange for someone to take you home**

You must have someone 18 years or older take you home after your procedure. If you don’t have someone to do this, call one of the agencies below. They will send someone to go home with you. There’s usually a charge for this service, and you will need to provide transportation.

**Agencies in New York**

Partners in Care: 888-735-8913
Caring People: 877-227-4649

**Agencies in New Jersey**

Caring People: 877-227-4649

**The Day Before Your Procedure**

**Note the time of your appointment**

A clerk from the Admitting Office will call you after 2:00 PM the day before your procedure. He or she will tell you what time you should arrive at the hospital for your procedure. If you are scheduled for your procedure on a Monday, you will be called on the Friday before. If you do not receive a call by 7:00 PM, please call 212-639-5014.

If you need to cancel your procedure for any reason please call the doctor who scheduled it for you.
Instructions for eating and drinking before your procedure

- Do not eat anything after midnight the night before your procedure. This includes hard candy and gum.
- Between midnight and up until 2 hours before your scheduled arrival time, you may drink a total of 12 ounces of water (see figure).
- Starting 2 hours before your scheduled arrival time, do not eat or drink anything. This includes water.

The Day of Your Procedure

Things to remember
- Take your medications the morning of your procedure as instructed by your doctor. Take them with a few sips of water.

Where to go
Please arrive at the main building of MSK at 1275 York Avenue. Take the M elevator to the 6th floor. Enter through the glass doors and check in at the desk.

What to expect
Once you arrive at the hospital, doctors, nurses, and other staff members will ask you to state and spell your name and date of birth many times. This is for your safety. People with the same or similar names may be having procedures on the same day.

After changing into a hospital gown, you will meet your nurse. He or she will place an intravenous (IV) catheter into a vein, usually in your hand or arm. At first you will receive fluids through the IV, but it will be used later to give you anesthesia (medication to make you sleepy). When it’s time for your procedure, you will be brought into the procedure room and helped onto an exam table. You will be attached to equipment to monitor your heart, breathing, and blood
pressure. You will also receive oxygen through your nose.

You will receive anesthesia through your IV. Once you are asleep, your doctor will insert a bronchoscope (a tube-like instrument with a small camera) into your nose or mouth. He or she will gently move it down the back of your throat and through the large and small airways leading into your lungs. Your doctor may use fluoroscopy, a type of x-ray, to guide him or her during your stent placement. If your doctor needs to take any biopsies (tissue samples) of your lung tissue, he or she can take them during this procedure as well.

**After Your Procedure**

**In the recovery room**

You will wake up in the recovery room. Your nurse will continue to monitor your heart, breathing, and blood pressure. You may have a chest x-ray. This is to make sure your lung was not punctured if you had a lung biopsy. This type of injury is rare. You may cough up a little blood after your procedure, which is normal.

Once you are fully awake, your nurse will give you a drink and remove your IV. Your doctor will talk with you and the person taking you home after your procedure. He or she will prescribe a nebulizer, which is a tool that you’ll use to take a medication in the form of a mist. You may start the nebulizers on the evening of your procedure. Your nurse, doctor, or a respiratory therapist will explain how to use them before you leave.

**At home**

- You may have a sore throat for 1 or 2 days. Throat lozenges, ice chips, and eating soft foods can help. You should avoid spicy foods and smoking.

- Pain after your stent placement can usually be relieved with mild pain medications such as acetaminophen (Tylenol®). Your doctor may prescribe other pain medications. Serious pain may require a short stay in the hospital.

- If you had any tests done during your bronchoscopy, call your doctor’s office in a few days to get the results.

- If you had to stop taking any medications before your procedure, ask your doctor when it is okay to resume taking them.

- You may resume your normal activities the day after your stent is placed.
Continue to use your nebulizer as directed by your doctor.

Your doctor’s office will call you to schedule follow up procedures to examine your airway and stent.

You will be given written information about your stent. You should keep this information for your records, or if you visit another hospital or doctor.

It is safe for you to have magnetic resonance imaging (MRI) and go through airport or security stations while you have a stent.

You may have radiation or chemotherapy while your stent is in place.

Possible Complications

- Your stent is held in place by pressure. When swelling and redness from your procedure lessens, there is a small chance that your stent will move. This may lead to sudden coughing or shortness of breath. Very rarely, you may cough up the stent. If this happens, call your doctor immediately.

- The inside of the stent may collect mucus that can block air flow. Depending on the type of stent, tissue may grow into the stent and make it narrow. Using your nebulizer can stop these things from occurring.

Call your doctor or nurse if you:

- Have chest pain or pressure
- Cough blood for longer than 2 days, or an amount greater than a teaspoon
- Cough up anything unusual, or if the amount or color of your sputum (mucus that you cough up) changes
- Have sudden shortness of breath or difficulty breathing
- Have a fever of 101° F (38.3° C) or higher
- Develop persistent bad breath not relieved by normal oral hygiene
- Have any problems, questions, or concerns
If you have any questions or concerns, talk with a member of your healthcare team. You can reach them Monday through Friday from 9:00 AM to 5:00 PM at _________________. After 5:00 PM, during the weekend, and on holidays, please call___________________. If there’s no number listed, or you’re not sure, call 212-639-2000.

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