Tracheal or Bronchial Stent Placement

This information will help you get ready for your tracheal or bronchial stent placement at Memorial Sloan Kettering (MSK).

About Tracheal or Bronchial Stents

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

![Figure 1. A stent opening the narrowed area of an airway](image)

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

Your stent will be placed during a procedure called a bronchoscopy. During a bronchoscopy, your doctor will put a flexible camera called a bronchoscope through your nose or mouth, into your trachea or bronchi. This will let them see inside your airways while they’re placing the stent. You won’t have a surgical cut.

Most people go home the same day that the stent is placed.

**Before Your Procedure**

**Presurgical testing (PST)**

Before your procedure, you will have an appointment for presurgical testing (PST). You can eat and take your usual medications the day of your PST appointment.

During your appointment, you will meet with a nurse practitioner (NP) who works closely with anesthesiology staff (doctors and specialized nurses who will give you give you anesthesia (medication to make you sleep) during your procedure). Your NP 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 needed to plan your care. Your NP may also recommend that you see other healthcare providers.

Your NP will talk with you about which medications you should take the morning of your procedure. Be sure your NP and doctor know all of the medications you’re taking. If you take an anticoagulant (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. Don’t stop taking it without talking with your doctor. Some examples of anticoagulants are:

- Aspirin
- Warfarin (Coumadin®)
- Dalteparin (Fragmin®)
- Heparin
- Tinzaparin (Innohep®)
- Enoxaparin (Lovenox®)
- Clopidogrel (Plavix®)
- Cilostazol (Pletal®)

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

☐ A list of all the medications you’re taking, including prescription and over-the-counter medications, 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**

If you will be leaving the hospital after your procedure, you must have a responsible care partner take you home. Make sure to plan this before the day of your procedure.

If you don’t have someone to take you home, 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.
The Day Before Your Procedure

Note the time of your procedure

A staff member from the Admitting Office will call you after 2:00 PM the day before your procedure. If your procedure is scheduled for a Monday, they will call you on the Friday before. If you don’t get a call by 7:00 PM, please call 212-639-5014.

The staff member will tell you what time to arrive at the hospital for your procedure. They will also remind you where to go. This will be the following location:

Memorial Hospital (MSK’s main hospital)
1275 York Avenue (between East 67th and 68th Streets)
New York, NY 10065
M elevator to the 6th floor

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

Take your medications

If your doctor or NP told you to take certain medications the morning of your surgery, take only those medications with a sip of water. Depending on what medications you take and the surgery you’re having, this may be all, some, or none of your usual morning medications.

Where to go

When you arrive at Memorial Hospital, please use the main entrance 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 say and spell your name and date of birth many times. This is for your safety. People with the same or a similar name may be having a procedure on the same day.

After changing into a hospital gown, you will meet your nurse. They will place an
intravenous (IV) catheter into one of your veins, usually in your hand or arm. At first, you will get fluids through the IV. It will also be used later to give you anesthesia.

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 get oxygen through your nose. Once you’re comfortable, you will get anesthesia through your IV.

Once you’re asleep, your doctor will put a bronchoscope into your nose or mouth. They will gently move it down the back of your throat and through your trachea and bronchi. Your doctor may use fluoroscopy (a type of x-ray) to guide them during your stent placement. If your doctor needs to take any biopsies (tissue samples) of your lung tissue, they can take them during your procedure as well.

**After Your Procedure**

**In the recovery room**
You will wake up in the recovery room. A nurse will be monitoring your heart, breathing, and blood pressure. Once you’re fully awake, your nurse will give you a drink and take out your IV.

You may cough up a little blood after your procedure. This is normal. If you had a lung biopsy during your procedure, you may have a chest x-ray. This is to make sure your lung wasn’t punctured. This type of injury is rare.

Your doctor will talk with you and the person taking you home after your procedure. They will prescribe a nebulizer, which is a small machine you’ll use to take a medication in the form of a mist. You will start the nebulizer treatments on the evening of your procedure. Your nurse, doctor, or a respiratory therapist will explain how to use the nebulizer before you leave.

**After you’re discharged**
You might have a sore throat for 1 or 2 days. To help manage pain or discomfort:

- Avoid spicy foods and smoking.
• Eat soft foods.
• Suck on throat lozenges or ice chips.
• Take an over-the-counter pain medication, such as acetaminophen (Tylenol®).

If you have a lot of pain or pain that’s getting worse, tell your doctor. They may prescribe other pain medications. If the pain is very bad, you might be re-admitted to the hospital.

**Medications**

Keep using your nebulizer. Follow your doctor’s instructions.

If you had to stop taking any medications before your procedure, follow your doctor’s instructions for starting to take them again.

**Test results and follow-up appointments**

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

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

**Other information**

• You can go back to doing your normal activities the day after your stent is placed.
• It’s safe to have magnetic resonance imaging (MRI) scans and go through airport or security stations while you have a stent.
• It’s safe to have radiation or chemotherapy while you have a stent.

**Possible Complications**

• Your stent is held in place by pressure. When swelling and redness from your procedure lessens, there’s 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 right away.
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 happening.

**When to Call Your Healthcare Provider**

Call your doctor or nurse if:

- You have chest pain or pressure.
- You cough up blood for longer than 2 days.
- You cough up more than about 1 teaspoon (about 5 milliliters) of blood.
- You cough up anything unusual.
- The amount or color of your sputum (mucus that you cough up) changes.
- You have sudden shortness of breath or difficulty breathing.
- You have a fever of 101 °F (38.3 °C) or higher.
- You develop bad breath that doesn’t go away and doesn’t go away with normal oral hygiene.
- You have any problems, questions, or concerns.

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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