Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

About Endorectal Contact X-Ray Brachytherapy (CXB)

This information will help you get ready for your endorectal contact X-ray brachytherapy (BRAY-kee-THAYR-uh-pee) at MSK. It explains what to expect. It also explains how to care for yourself before, during, and after your brachytherapy.

Contact X-ray brachytherapy is also called Papillon (pah-pee-YAWN) brachytherapy.

About brachytherapy

Brachytherapy is a type of radiation therapy. Radiation therapy works by damaging cancer cells, making it hard for them to multiply. Your body can then naturally get rid of the damaged cancer cells.

With brachytherapy, the source of radiation is put inside or close to the tumor. The radiation is low-energy and does not travel far from the source. That means the tumor gets a high dose (amount) of radiation, while nearby healthy tissue gets little or no radiation.

About endorectal contact X-ray brachytherapy

With endorectal CXB, the radioactive source (called an applicator) is placed inside your rectum. Your rectum is the end of your large intestine, where stool (poop) is stored before it leaves your body.

The applicator gives off precise, high doses of low-energy X-rays. Because the X-rays are low-energy, they don't travel more than a few millimeters to a centimeter (less than 0.4 inches). That means they mostly target the tumor. Healthy tissue around the applicator and deeper in your body gets very little

radiation.

Most people get a total of 3 endorectal CXB treatments. You will be in the treatment room for about 1 hour each time. Your care team will spend most of this time setting up and making sure you're in the right position. The treatments themselves only take about 5 to 15 minutes.

You will not be radioactive during or after your treatment. It's safe for you to be around other people, children, and pets.

Most people have their treatments 1 to 2 weeks apart. Your radiation oncologist may change the timing or number of your treatments. They'll talk with you about what to expect.

What to do before your endorectal contact X-ray brachytherapy

You will have an appointment with a radiation oncologist and radiation nurse before your endorectal CXB. They will tell you what to do to get ready for your procedure.

Arrange for someone to take you home

You must have a responsible care partner take you home after your procedure. A responsible care partner is someone who can help you get home safely. They should be able to contact your care team if they have any concerns. Make sure to plan this before the day of your procedure.

If you don't have a responsible care partner to take you home, call one of the agencies below. They'll send someone to go home with you. There's a charge for this service, and you'll need to provide transportation. It's OK to use a taxi or car service, but you still need a responsible care partner with you.

Agencies in New York

VNS Health: 888-735-8913

Caring People: 877-227-4649

Agencies in New Jersey

Caring People: 877-227-4649

The night before your procedure

You will need to clear extra poop from your rectum before your procedure. This lets your radiation oncologist see the tumor more clearly and direct the radiation as precisely as possible.

Give yourself a saline enema (such as a Fleet® saline enema) 2 hours before you go to bed. Follow the instructions in the package. You can buy a saline enema at your local pharmacy without a prescription.

The enema will make you have a bowel movement (poop) within a few minutes after you use it. It's best to stay near a bathroom for about an hour after using the enema. You may need to poop more than once.

Do not eat anything after you give yourself the enema. Only drink clear liquids (liquids you can see through). Read *Clear Liquid Diet* (www.mskcc.org/pe/clear-liquid-diet) to learn more about what you can and cannot have after using the enema. Avoid having anything red, orange, or purple.

What to do the day of your endorectal contact X-ray brachytherapy

Instructions for drinking

Between midnight (12 a.m.) and 2 hours before your arrival time, only drink clear liquids listed below. Do not eat or drink anything else. Stop drinking 2 hours before your arrival time.

- Water
- Clear apple juice, clear grape juice, or clear cranberry juice
- Gatorade or Powerade. Do not have red, orange, or purple Gatorade or Powerade. These colors can look like blood inside your rectum.
- Plain back coffee or tea with or without sugar. Do not add any type of milk, creamer, or anything else.
- If you have diabetes, pay attention to the amount of sugar in your drinks. It will be easier to control your blood sugar levels if you include sugar-free,

low-sugar, or no added sugar versions of these drinks.

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What to expect during your procedure

When you arrive for your treatment appointments, check in at the front desk. A staff member will ask you to take off any clothing below your waist. They'll give you a hospital gown and special shorts to change into. They will also ask you to empty your bladder. Then, they will bring you into a treatment room.

In the treatment room, you will lie on your back with your legs raised and placed into stirrups (see Figure 1). Your care team will help you get into position.



Figure 1. Endorectal CXB treatment position

Your radiation oncologist will put a numbing medicine inside your anus. You may also get light sedation (medicine to make you sleepy during your procedure).

Once the area is numb, your radiation oncologist will put a rigid (stiff) tube into your rectum to see the tumor. Then, they will put the applicator into your rectum. The applicator is shaped like a cylinder.

Your radiation oncologist will adjust the applicator's position until the end is over the tumor. Then, they will pass an X-ray tube through the applicator. Once the tube is as close to the tumor as possible, X-rays will travel through it to the tumor.

Your radiation oncologist will take the tube and applicator out of your rectum once your treatment is finished. You do not need to follow any special precautions after your treatments. You can leave the hospital after your treatments.

What to expect after your endorectal contact X-ray brachytherapy

Side effects of CXB

You may have side effects after your treatment. You may have some, all, or none of the side effects listed in this section.

Your care team will help you prevent and manage side effects. Talk with a member of your care team if you have questions about side effects.

Pain

You may have mild (not bad) to moderate (somewhat bad) pain in your rectum after each treatment. If you do, you can take an over-the-counter pain medicine. Ibuprofen (Advil®, Motrin®) and acetaminophen (Tylenol®) are examples of over-the-counter pain medicines.

Rectal bleeding and discharge

Most people have mild bleeding (spotting) from their rectum after each treatment. You may also have mucous discharge (thick, jelly-like substance) from your rectum. It's usually a small enough amount that you do not need a pad or diaper.

Delayed rectal bleeding

Some people have rectal bleeding that starts after they finish treatment. If this happens, it usually starts about 3 to 6 months after treatment. Some people may start to have bleeding months or even years later. The bleeding is from small, dilated (widened) blood vessels in the treated area.

Delayed rectal bleeding is usually mild, and it usually comes and goes. It often appears as light spotting. It can also appear as small streaks of bright red blood on your poop, toilet paper, or underwear. Some people choose to wear a light pad or liner if the bleeding happens often.

Bowel changes

After starting treatment, you may:

- Have diarrhea (loose, watery poop) or softer poop than usual.
- Have to poop more often than usual.
- Feel urgency (a sudden, strong need to go) before bowel movements (pooping).
- Feel like you need to poop when you don't actually.

These bowel changes usually get better within a few weeks to months after you finish treatment. Very rarely, some people have long-lasting bowel changes caused by inflammation from treatment.

Contact your care team if you're having any of these symptoms. They may suggest taking medicine or changing your diet to help manage them. Follow your care team's instructions.

At home

You are not radioactive after your treatments. You do not need to follow any radiation precautions. It's safe to be around people, children, and animals.

You can go back to moving around and eating normally as soon as you leave the hospital. You can do all your usual activities, including physical activity.

Follow these guidelines after you leave the hospital:

- Do not drive for the rest of the day after your treatment. You can start driving again the day after your treatment, as long as you are not taking any prescription pain medicines that make you sleepy.
- Do not put anything in your rectum for 6 weeks after your treatment.

When to call your healthcare provider

Call your healthcare provider if you:

- Have a fever of 100.4 °F (38 °C) or higher.
- Have chills.
- Have pain that does not get better after you take over-the-counter pain medicine.
- Have diarrhea more than 3 times in 1 day that does not get better after you take medicine for diarrhea.
- Do not poop for 3 days.
- Have heavy bleeding from your rectum that soaks through pads or underwear.
- Pass blood clots from your rectum.
- Feel dizzy, unusually weak, or short of breath (like it's hard to breathe).

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

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

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