HDR Brachytherapy for Esophagus Cancer
What is High Dose Rate (HDR) Brachytherapy?
Brachytherapy (pronounced brack-ee-ther-a-pee) is a form of radiation treatment. It uses a radioactive source that is put in or near the cancer. This allows a high dose of radiation to be given directly to the tumour site in your body.

HDR brachytherapy is used to shrink tumours in the esophagus. Your esophagus is the tube through which food passes when you swallow. You may need more than one treatment. Your radiation oncologist will decide how many treatments you will need.

How do I get ready for my treatment?
- You must not eat anything after midnight on the night before your treatment. Your treatment must be given on an empty stomach.

What will happen on the day of treatment?
The procedure takes place in the Brachytherapy Unit, in the Nova Scotia Cancer Centre, in the Dickson Building on the Victoria General Hospital site.

You must register at the Cancer Centre 30 minutes before your treatment. Please leave time to find parking at the hospital, if needed.
- Leave your belongings with a family member
- Bring your provincial health card
- Bring all of your medicines, in their original containers
- Take your regular daily medicines at the usual times unless you are told otherwise
- Remember: DO NOT EAT after midnight the night before your treatment!

What are your questions? Please ask.
We are here to help you.
What happens during the treatment?

• The procedure should take about 90 minutes.
• There will be several staff in the room.
• You will be given some medications to help you relax.
• The radiation oncologist will do a scope of your esophagus so that the tumour can be seen.
• Once the location of the tumour has been found, the scope will be removed. The treatment applicator (tube) will be put into your esophagus. It is smaller than the scope.
• The radiation therapist will take X-rays that they will use to plan your treatment.
• When the treatment plan is ready, the radiation therapist will connect the applicator (tube) that is in your esophagus to the treatment machine.
• The radiation source will move from a special machine through the applicator (tube) to deliver the treatment.
• During the treatment, the team will leave the room.
• Your team will be able to see and hear you when the treatment is being given. The team can stop the treatment at any time if you need help.
• Your treatment will last 15-20 minutes.
• After the treatment is finished, the radiation oncologist will remove the applicator.

What happens after treatment?

You will be taken to a recovery area in the Cancer Centre. A nurse will monitor you. Your family can wait in the main waiting room at the Cancer Centre. You can go home after about an hour. A responsible adult must take you home. After you leave the Cancer Centre:

› Do not drive or operate any machinery for 24 hours
› Do not sign any legal documents or important papers for 24 hours
› Do not drink alcohol for 24 hours
› Do not drink alcohol while taking pain medicine
› Do not act as the primary care provider for dependents

If you need more than one treatment, we will tell you the date and time of your next treatment. Each treatment follows the same steps. After your last treatment, we will make sure you have a followup appointment.
What are the possible side effects of this treatment?

Radiation affects both normal cells and cancerous cells. When normal cells are damaged, there may be side effects. Common side effects include a dry, sore throat/esophagus, trouble swallowing, narrowing of the esophagus, bleeding, fatigue (tiredness) and loss of appetite.

Trouble swallowing

This treatment will irritate your esophagus. You may feel like you have heartburn or a “lump” in your esophagus. You may have pain or trouble swallowing certain foods.

• Try eating smaller amounts of food more often.
• Do not drink alcohol, as it will irritate your throat.
• Choose bland (mild) foods. Highly seasoned and acidic foods are more likely to irritate your throat.
• Choose foods that are warm (not hot) and cool (not cold). Foods at extreme temperatures can cause irritation.
• Drinking liquids with meals may be helpful, especially if you are having a hard time swallowing or a burning sensation. Try sipping on liquids between bites of solid foods.
• Your radiation oncologist may prescribe a special liquid that will help you swallow more easily by reducing the pain in your throat.

Foods that may help

› Soups (warm, not hot)
› Yogurt
› Soft eggs (poached, scrambled)
› Puddings, custards
› Pasta

› Milkshakes
› Juices: apple, pear, peach
› Canned fruits
› Vegetables that are well cooked or mashed
› Chopped meats with gravy

Foods to avoid

› Toast, dry cereal
› Crackers, cookies, cake
› Raw vegetables
› Popcorn, nuts, potato chips
› Tart or acidic foods

› Spicy foods (pizza, chili)
› Citrus juices: orange, grapefruit
› Regular meats (especially dry, coarse or stringy)
Narrowing of the esophagus
You may have narrowing (stricture) of the esophagus. This means that the space inside your esophagus gets smaller. This can cause trouble swallowing. The narrowing may be caused by swelling, and only be temporary. The narrowing may be caused by scarring in the esophagus. When scarring happens, the lining of the esophagus becomes stiff. As scar tissue builds up over time, the esophagus narrows in that area and causes trouble swallowing.

Following the advice on page 3 may help with trouble swallowing.

Bleeding
This treatment will irritate the lining of your esophagus, which may cause bleeding. This is usually a small amount of blood that you may cough up. This may last for a few weeks. If this lasts for more than a few weeks, call your doctor. If there is a lot of blood and the bleeding lasts for more than 15 minutes, go immediately to the nearest Emergency Department.

Fatigue (tiredness)
Fatigue caused by radiation treatment is usually mild. You may be more tired after usual activities or may need to rest more than usual. You will be given an information sheet with suggestions to help you cope.

What if I have questions?
Please ask your health care team any questions you have about your treatments.

Doctor: __________________________________________
Nurse: ___________________________________________

Call 902-473-6067 to leave a message for your radiation oncologist or nurse. If you have any problems from your treatment after hours, call 902-473-2220 and ask to speak to your radiation oncologist.