Tandem and Ring or Tandem and Ovoid HDR Brachytherapy

High Dose Rate (HDR) is a dose of radiation given over a few minutes rather than hours or days. Tandem and ovoid or tandem and ring HDR are methods of delivering a high dose of radiation directly to the cancer within the uterus, cervix, or vagina. (See pictures on the next page, showing the slightly different parts used to deliver the treatment.) A radioactive source is inserted inside a small, hollow applicator and remains for several minutes until the correct amount of radiation is given as prescribed by your doctor.

Treatment Course

Most patients have 5 treatments once or twice a week while receiving external beam radiation treatments the other days of the week. Sometimes the doctors will recommend HDR treatments without external beam radiation. Each treatment takes about 3 hours. The correct size applicator for your treatment will be determined during your first visit.

Before Your Treatment

- Do not eat or drink liquids 4 hours before the treatment. (See our handout, “Sedation for Your Radiation Treatment.”)
• Take prescription medicines in the morning with a small sip of water. Tell the doctors if you are taking a blood thinner or if you usually have to take antibiotics before having your teeth cleaned. If you are diabetic, please discuss your medicine needs before the treatment.

• Arrange for someone to drive you home.

**Tandem and Ovoid or Tandem and Ring HDR**

Before treatment, you will change into a gown. A small intravenous (IV) needle will be placed to give you medicine during the treatment. The nurse will monitor your vital signs, give medicines, and provide nursing care. During the treatment, you will lie on your back with your legs raised. Medicines will be given to make you comfortable. They may also make you sleepy. The doctors will do a pelvic exam to determine which shape and size of applicator fits you.

The area around the genitals is cleansed with an anti-bacterial soap. A soft rubber tube will be placed into the bladder for urine drainage. The applicators are placed inside your vagina and uterus. Some cramping and sensation of pressure may be experienced, which will be relieved by IV medicine. Wet gauze is then placed inside the vagina to hold the applicator in place, and to displace the bladder and rectum so they receive the lowest possible dose of radiation.

X-ray films will be taken in the simulator to visualize the area to be treated and the placement of the applicator. The X-rays are used for computer treatment planning.
The treatment planning ensures you receive the exact dose of radiation needed. The time required for computer planning is about 30 to 45 minutes. Computer calculations determine the amount of time needed to deliver the correct dose of radiation to the tumor site.

Once the computer treatment plan is obtained, you are ready to receive the internal radiation. The HDR remote-controlled machine is connected to the applicator with a thin hose-like tube. The radiation source is passed through this tube into the applicator and remains until the prescribed dose of radiation has been given.

You will not feel the radiation treatment as it is delivered. During the treatment, you will be left alone in the treatment room, but we are able to see you on a closed circuit TV and talk to you using an intercom system.

After Your Treatment

After the treatment is done:

- The applicator, gauze, and catheter will be removed.
- You will be able to go home after the comfort medicines have worn off. Make plans before your treatment for someone to drive you home.
- Your memory of the procedure may be “fuzzy,” which is a short-term side effect from the medicines. The sedation effects can last up to 24 hours.
- DO NOT drive or drink alcohol for 24 hours.
- You may resume your normal diet.
- You will not be radioactive after the treatment.

Self-Care at Home

Watch for these signs and follow these tips after your treatment:

- Some spotting or bleeding from your vagina is expected. The bleeding should not be more than a regular menstrual period. Do not use tampons or douche after the treatment.
- You may experience some uterine cramping after the procedure. Ibuprofen or naproxen may be helpful. Take it according to the directions on the bottle.
Questions?

Call 206-288-7650

Your questions are important. Call your doctor or health care provider if you have questions or concerns. SCCA staff are also available to help at any time.

SCCA Radiation Oncology: 206-288-7318
Weekdays 8 a.m. to 5 p.m.

After hours, and on weekends and holidays, call the Paging Operator at 206-598-6190 and ask for the Radiation Oncology Resident on-call.

• Drink 8 to 12 glasses of fluids each day for the next 1 to 2 days. Having a catheter during the treatment may cause some burning or irritation when you first urinate.

• It is safe to have sexual intercourse between treatments, but it may be uncomfortable.

Call the Doctor If You Have:

• Fever above 101° F.

• Pain that is not relieved with medicine.

• Bleeding as much or more than a normal menstrual period. Light spotting for 1 or 2 days is expected.

• Burning with urination or blood in the urine lasting longer than 24 hours.

If you are taking aspirin, please call the nurse at 206-288-7650.

Your Next Treatments:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Doctor</th>
<th>Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>