Why does radiation cause changes to the vagina?

Radiation therapy to the pelvis can cause changes in the vagina. It can cause the vagina to become narrower, shorter, less elastic, and drier. Although these side effects vary, they can make it difficult for you to have a pelvic exam and it can cause difficulty or discomfort during sexual intercourse.

What can be done about vaginal changes?

There are a number of things you can do to maintain the health of your vagina and overcome these changes. This handout describes how to use a combination of vaginal exercises including: Kegels, vaginal massage, and dilator therapy, as well as how to use vaginal lubricants and moisturizers.

Vaginal dilators and lubricants

A vaginal dilator is a cylinder or tube used to stretch your vagina and prevent narrowing and shortening. It will be given to you by a health care provider, either a doctor or a nurse practitioner. Start using the dilator when your provider tells you. This is usually after your one month follow up visit once treatment has ended. It is recommended that you have sexual intercourse or use a dilator three times a week, but do so as often as your provider suggests. If you are sexually active, try using the dilator prior to resuming sexual intercourse. That way you can test your emotions and see how your vagina feels after treatment. Allow yourself time without any interruptions when you use the dilator. Review the contents of your kit and the instructions that are included.
When you use your dilator and/or have sexual intercourse, you will need to use a lubricant to prevent injury to the vaginal membranes. Only use water based lubricants such as Surgilube®, K-Y® Jelly, or Astroglide®. **Never** use petroleum jelly or Vaseline®, or solutions that make the skin feel warm, have colors or flavor, or are used to kill bacteria. These can irritate your vagina.

To help with pain relief, your doctor may prescribe Lidocaine or pain medication before using your dilator.

**Vaginal moisturizers**

To overcome vaginal dryness from radiation, regular use of moisturizers is very helpful. These are sold over-the-counter and can be purchased at your local drug store.

- **Replens®** - Use this moisturizer two-three times a week or as directed. You can buy this without a prescription.
- **Vitamin E capsules** - (400 or 800 International Units). Puncture the capsule with a pin, apply some lubricant and gently insert the capsule into the vagina two or three times a week. You can also squeeze the contents of the capsule onto your finger and then insert into your vagina. Vitamin E may stain, so you may want to wear a panty liner.

Using the vaginal dilator, lubricant and moisturizers may feel awkward to you at first, but these are useful methods to help you recover from the effects of your treatment.

**How to use your dilator**

1. **Gather** your supplies: dilator, lubricant, towel, and pillows (a hand mirror may help you to see your vaginal opening). You may want to do something to help you relax while the dilator is in place. For example, watching TV, listening to music, or reading a book. For some women, using guided imagery also helps them relax. Think of places that make you happy and comfortable. Listening to relaxing music or nature sounds may help, too.
2. **Wash** your hands and the dilator with soap and warm water, and dry the dilator with a clean towel.

3. Go to a **Private** area, such as your bedroom or bathroom where you can use the dilator without interruption.

4. **Position** yourself so that you can easily touch the opening of your vagina. You may lie on your back with your knees at a 45-degree angle, rest your feet comfortably on the bed, couch or floor of the tub. Place pillows behind you for support so that you do not need to pull yourself up by your abdominal muscles.

5. **Lubricate** your vagina. You can use an applicator (if the lubricant comes with one) or squeeze some lubricant on your finger and place your finger with the lubricant on it in your vagina. Also put a generous amount of lubricant on the dilator. Spend time relaxing your body and muscles. Tense and relax the pelvic floor muscles a few times (see Kegel exercises on the next page).

6. As you **Insert** the dilator, be sure your muscles are relaxed. Take several deep breaths, and breathe out as you insert the dilator. Make sure that the dilator is placed as deeply and as comfortably for you. Once the dilator is inserted, gently move it in until you feel pressure. Hold it in place for the time prescribed by your doctor. If your vaginal muscles are tensing and you cannot insert the dilator, it can help to push against or ‘bear down’ like you would if you were passing gas. This helps to relax that muscle and make insertion easier.

7. **Remove** the dilator after the required time passes and wash it again with soap and warm water and towel dry. Do not use: bleach, ammonia or iodine, and do not place it in the dishwasher.

If you are still unable to insert the dilator or have significant pain, you may need a smaller dilator or more instruction.

Many women need help as they begin using a dilator. Do not hesitate to call your nurse or doctor. They are here to help you.
Possible complications

You may have a small amount of bleeding (a panty liner should be enough). If you have a lot of bleeding (soaking a sanitary pad); call your doctor.

Kegel exercises

Kegel exercises are done to help strengthen the pelvic floor muscles. During urination, it is this muscle contraction that starts and stops the steam of urine. The goal of Kegel exercises is not to tense the muscles, but to learn to relax these muscles, which can make inserting the dilator, having intercourse, or undergoing vaginal exams easier.

When you are contracting the pelvic muscles, you are tensing them. You relax the muscles, or stop the contracting/tensing, by pushing slightly, as if you were attempting to expel urine or a tampon. Pay close attention to this relaxation aspect. These exercises should be repeated several times a day and can be done without anyone around you knowing that you are doing them (sitting at your computer, in the car, waiting in line, anytime you think of it), and can be helpful in strengthening the pelvic floor. Since the pelvic floor muscles are also involved in orgasmic pleasure, you may also be able to enhance orgasm.

Vaginal massage

Muscle tension can cause spasms or difficulty with inserting a dilator or when you are having intercourse. The area that can cause the most difficulty is the lower part of the vaginal opening (closest to the anal opening) and can be massaged gently to prevent spasms. By using your thumb or finger to gently massage the muscle to see if it responds to your attempts to relax. Some women have found it effective to “work” the pelvic floor muscles while they are taking a shower, or just before or during vaginal dilator exercises or with your partner using lubrication. In the shower you can put a foot up on the side of the tub, use a little bit of lubrication or saliva (which is slipperier than water) on your fingers. Locate the vaginal opening and insert your thumb to massage by pressing gently back toward your anal opening.
For more information:

The University of Michigan's Department of Social Work has a Center for Sexual Health staffed by certified, professional sex therapists. Brochures are available or you can go to their website, www.med.umich.edu/sexualhealth to learn more about the services that they offer. You can talk to a doctor or nurse about a referral or you can self-refer by calling (734) 763-4963.

Who should I call if I have questions?

On weekdays, Monday thru Friday, 8:00 am to 5:00 pm, contact the Radiation Oncology Department at (734) 936-4300.

On weekends, holidays or after 5:00 pm on weekdays, contact the paging operator at (734) 936-6267. Ask to have the On-Call Radiation Oncology Resident paged.