Central East Regional Cancer Program Ontario Health (Cancer Care Ontario)

Deep Breath Hold for Radiation Therapy

This handout offers information on the deep breath hold technique for radiation therapy. Watch the "Deep Breath Hold technique for Radiation Therapy' video on the Cancer Care pages of the Lakeridge Health website for more information. You can find the video by searching for "Deep Breath Hold technique for Radiation Therapy" or go to this link:

lakeridgehealth.on.ca/en/ourservices/Radiation-Therapy-Patient-Education.asp

Purpose of the deep breath hold

Your heart or other organs may be very close to your treatment area. A deep breath hold lets your lungs fill with air and moves your heart or other organs away from the treatment area. This helps reduce the amount of radiation dose your heart or other organs receive.

Steps for practicing the deep breath hold at home

- 1. Lie down on your back in a comfortable place (for example: on your bed).
- 2. Raise both arms up above your head. Put a pillow under your arms if this position is not comfortable for you.
- 3. Put a pillow under your knees. This allows your knees to be bent in the right way.
- 4. **Take a slow deep breath in** and hold it for the time you and your team decided at your simulation appointment. You should feel your abdomen move up towards your chest.
- 5. Breathe out.
- 6. Breathe normally.
- 7. When you are ready, repeat the steps above.

When you practice the deep breath hold, it is important you:

- Practice the deep breath hold 2 to 3 times every day until you begin treatment.
- Relax your muscles as much as possible.
- Do not arch or bend your back.
- Keep your arms and head still.
- Breathe normally after each breath hold.
- Try to take in the same amount of air with each breath hold.

During your radiation treatments

We ask you to use the deep breath hold during your treatments.

We will let you know if we need to draw marks on your skin using a marker. If you have these marks they may change from day to day. They help us position you in the right way for your treatment.

We tell you when to hold your breath and when to breathe normally. The radiation is turned on when you are holding your breath. If you need to stop holding your breath at any time during treatment, the radiation will be turned off. This is okay. We give you time to relax and restart when you feel ready.

If you have a problem or concern about a symptom or side effect from your cancer treatment:

- 1. Call your primary nurse at the cancer centre from Monday to Friday, 8:30 am to 4 pm, (except on holidays). Use the phone number your primary nurse gave you.
- 2. Contact CareChart Digital Health from Monday to Friday, 5 pm to 8:30 am and anytime on weekends and holidays for symptom management support.

Talk to a nurse using one of these options:

- Call the after-hours telephone line at 1-877-681-3057.
- Request a video call by going to www.carechart.ca.
- Use the CareChart Digital Health App. This App is available to download for iOS or Android devices.

Call 911 or go to the emergency department at the hospital closest to you for a medical emergency. Talk to a member of your healthcare team if you have questions or do not understand any information in this handout.

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