

Breath hold for CT simulation and radiation treatment

Why may I need to hold my breath?

Sometimes the heart may lie very close to the chest wall. During breast radiation, taking a deep breath in and then holding your breath pushes the heart away from the chest wall and away from the treatment area. The proper name for this technique is Deep Inspiration Breath Hold.

Why do I have to practice holding my breath before my CT simulation appointment?

Practice is the key to being able to perform and maintain a proper breath hold during treatment. Practice helps your treatment to be consistent and accurate.

How do I practice?

Start off slowly holding your breath for 10 seconds and over a few days increase this time to 40 seconds

1. Lie down on your back (as this is how you will be during treatment)
2. Raise your left arm above your head.
3. Breathe normally and **relax** as much as possible.
4. When you feel ready, take a deep breath in and hold (don't let any air out). Expand your chest fully, without arching your back or raising your shoulders.
 - ✓ Practice a few times a day.
 - ✓ Take a break if you feel light headed or dizzy.

How long must I hold my breath?

For your CT simulation appointment you will need to hold your breath for about 40 seconds. For treatment it will only be 20 to 30 seconds each time the machine is turned on. Your Radiation Therapist will guide you through the process.



Is there a chance that I will not need to hold my breath?

Yes, if your heart lies well away from the chest wall, you will not be asked to hold your breath during radiation treatment. This will be determined at the time of your radiation planning visit but we still require you to practice before your appointment as your doctor has considered that you may benefit from this treatment.

What if I cannot hold my breath?

If you cannot hold your breath, other measures will be used to protect your heart during the radiation treatment. It is important that you practice before deciding if you are able to breath hold for treatment.

What happens if I let go of my breath while the radiation is on?

Nothing! If you stop holding your breath during the radiation, the machine will automatically turn off and you will be asked to rest and then try again when you are ready.

We are looking for a consistent pattern in holding your breath. Try to relax as this makes it easier for a smooth consistent technique.

Resources

We have a video that can help you practice:

To find the video, go to www.hhsc.ca, (or hamiltonhealthsciences.ca)

- click on the drop down menu AREAS OF CARE
- click on CANCER CARE
- click on CANCER SERVICES (to right of screen)
- click on Radiation therapy
- click on Deep Inspiration Breath Hold, then play the video



Please contact Michele Cardoso, Clinical Specialist Radiation Therapist if you have any concerns or questions about this technique or for support with practice. **905-387-9711, ext. 63717**