

C.T. Scan (also CT or CAT)



Radiology Department

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What is a C.T. Scan?

A C.T. scan is a form of X-ray. A computer is used to make the picture of the part of the body we want to see. C.T. scans are different from a plain X-ray. They show the inside of the organ. They show different types of tissue, e.g. bone and fat, as well as fluid in the tissues.

How is it done?

Your child lies on a narrow table and is held in place safely with bands. The table then slides into the C.T. scanner that looks like an oversized "Lifesaver mint". The camera moves around in the scanner taking many pictures. The computer combines the pictures to form the big image.

Your child will see a moving light and hear a whirring sound as the scanner takes the pictures. Most children feel more secure if their parent is with them during the study. However, if you are pregnant, or think you may be, let the radiologist or the technologist know.

To get clear pictures of certain parts or things in the body, **we may give your child a contrast medium (or dye)**. A contrast medium highlights the tissues so that they show up more clearly. The contrast medium is injected through an intravenous. Depending on the type of test, the contrast is given either before, or as a second part, of the scan.

How to prepare.

To get clear pictures, your child needs to be very still during the study. Some children find this difficult.

Please get ready for the scan in this way:

Babies under 2 months of age:

Keep your baby awake and do not feed him/her for 3 hours before the appointment. Bring a bottle (unless you breastfeed), security toy/blanket and a pacifier (if your child uses one). If your baby is tired and feeds just before the scan, s/he will usually fall asleep for the scan.

Children 4 months to 5 years of age:

Most children under 5 years find it very hard to hold still for a long time. So, a doctor gives a sedative or a general anesthetic. An intravenous line (a thin plastic tube) is put into your child's hand. If your child already has a line in place, the same line is used. Most children sleep for 30 minutes in a recovery room. A nurse is in the room to watch your child until s/he is fully awake.

To make sedation or the anesthetic safe, your child must have an empty stomach. **Please follow the fasting instructions.** Fasting means 'no food or drink.' A nurse will call to discuss these with you.

Most children over 5 years can hold still without sedation. They do not need to fast but it is best to eat only a light meal before the scan.

It helps to practice keeping still ahead of time. (See section on Reassuring your child.)

Note: Children having scans of the pelvis or abdomen must fast for 4 hours before the scan. They also may be asked to drink a contrast medium mixed with juice prior to the exam. The Radiology Department will tell you more about this when your appointment is made.

Children having a C.T. scan of the head can wear their clothes. If the scan is of your child's chest, back, abdomen or pelvis, your child will change into a hospital gown.

Please phone and tell the Radiology Department, 875- 2329, at least a day before if:

- your child has special needs eg. diabetes or,
- your child has a fever, signs of a cold or chest infection,
- your child is older than 5 years but you think s/he will not be able to lie quietly for at least 10 minutes during the scan.

How long does a C.T. scan take?

Allow 15 minutes for a C.T. Scan. If your child is sedated, allow at least 2 hours.

Are there any side/after effects?

Not usually. Rarely the contrast medium gives a feeling of warmth or nausea. This goes away quickly.

Tell the radiologist about any allergies or other reactions to contrast in the past. Some (very few) people do have a serious reaction to the contrast.

If your child is given a sedative, we will tell you about the type and dose, and the after effects you can expect.

How does it feel?

The needle prick may hurt a little when the contrast is injected or the IV is put into a vein. Scanning doesn't hurt. You can tell your child it is like having a picture taken.

Reassuring your child.

Some children are frightened by the strange machines. Talk honestly with your child about what to expect. Explain what will happen.

Show the picture of the scanner on the cover of this brochure. You can describe it as a very big camera which looks like a very big "Lifesaver mint" and takes pictures of the inside of the body. Explain that just as it does not hurt to have a picture

taken with an ordinary camera, it won't hurt to have a picture taken with this camera. Just like you need to hold still to have a picture taken with an ordinary camera, you need to hold still with this camera - but this camera takes much longer to take a picture. It takes as long as it takes to say:

"Here we go -- don't move!"

See the light, hear the sound, while the camera turns around.

Hold still, don't move!"

Your child can practice lying very still while you say this or some other rhyme. Make a game out of being "so still you don't even blink". Tell your child that you will say the rhyme as the scanner takes the picture. If you and your child practice holding still for a rhyme, you can then use this to help your child during the test.

How do we get the results?

Once the radiologist has "read" the images, he/she writes a report to the doctor who asked for the test. This doctor will discuss the findings with you. The results are usually sent within 2 - 3 days.

Outpatients

The hospital is a busy place. Although there is pay parking on the site, it can be hard to find a space. You must register at the Admitting Department before coming to the Radiology Department for the scan.

Please make sure you allow enough time for all these possible delays.

Admitting and Radiology are on the main floor of B.C.'s Children's Hospital.