Lithium with Iodine-131 Treatment

This handout will help you understand how Lithium and Iodine-131 (I-131) work together in your body to treat thyroid cancer. If you have had I-131 in the past and need to take it again, your doctor may want you to take a medicine that has the special ability to help the I-131 work better. The Lithium is given as a pill along with the I-131 and improves what the I-131 can do alone.

Here’s how it works. Iodine-131 is attracted to thyroid cancer cells. The attraction is something like water to a sponge. I-131 can destroy thyroid cancer cells that are not removed by surgery. If I-131 leaves the body too fast, not all the thyroid cancer cells are destroyed. The Lithium helps I-131 stay in your body a little longer, so thyroid cancer cells have more time to absorb the I-131.

When would I start taking Lithium pills?

You will start to take the Lithium pills 1 week before the I-131 tracer dose is given. The tracer dose of I-131 is a low dose of radioactive iodine that helps your doctor make decisions about your future treatment.

Two days later, you will be given a second dose of I-131. This is a higher dose, called the therapy dose. You may need to stay in the hospital after this dose to allow time for the radioactive Iodine-131 to leave your body. You will be told before you come to the hospital, if you need to be admitted.

You will stop taking the Lithium pills about 2 weeks after your therapy dose of I-131 is given.
How should I take my medicines and Iodine-131 Therapy?

Your doctor will give you detailed instructions about your therapy schedule and how to take your medicines. You will be given dates for when to start and stop your thyroid and lithium medicine. The schedule will also include the dates for both the Iodine-131 tracer and therapy doses. Your doctor may order you to have blood drawn and will include the dates in your written instructions.

You may find it helpful to bring a calendar to write in the dates and times for your medicines, Iodine-131 treatments, and clinic appointments.

Are there side effects to taking Lithium pills?

When Lithium is taken as directed, there are normally few side effects. If side effects occur, most are very mild and will go away when you stop taking the medicine.

Some people who take this medicine feel tired and sleep more. Others may have slowed thinking, talking, or less ability to focus or concentrate. Medicines affect people in different ways. Talk to your doctor if you have any questions about the side effects with this medicine.