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You may notice tenderness in your upper abdomen over the next few days. This is normal and is caused by swelling in the liver. Pain medicine will control the tenderness.

#### **Will I feel sick?**

During the injection you may feel like you want to vomit. You may feel this way for a few days after the treatment is finished. Most people will not vomit.

Some people notice other side effects such as pain in the abdomen, constipation, fever, sweats, chills, fatigue, lack of appetite and hiccups.

All of these problems can be managed by adjusting your medicine. Many people do not get any of these side effects.

#### **When can I go home?**

The usual hospital stay is 6 days. Daily blood tests will show how your liver is working. When the liver is working as it should and you do not have a fever, you can go home .

#### **What needs to be done after I leave hospital?**

When you leave, you may still feel some side effects. Medicine will be prescribed for you to take at home. To see how the

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cancer reacted to the treatment, you will need to do the following:

- Eight weekly blood tests done at a lab or near your home. A requisition will be given to you.
- A CT scan will be done at the London Health Sciences Centre about 8-10 weeks after the treatment.
- You may need to have a 24-hour urine collection before your next appointment.

A follow-up appointment will be arranged at the London Regional Cancer Program or about 2 weeks after your CT scan.

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#### **Comments, Feedback?**

**Contact Patient & Professional Education**  
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**Neuroendocrine  
Cancer**

## **Hepatic Arterial Lipiodol Chemoembolization (HALCE)**

**For Patients with Carcinoid  
Tumour (non-functional)**



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London Regional Cancer Program

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[www.lhsc.on.ca/About\\_Us/LRCP/](http://www.lhsc.on.ca/About_Us/LRCP/)

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## What is carcinoid tumour?

Carcinoid tumours are also called neuroendocrine cancer. This cancer is rare and usually slow growing. It can start in the bowel, lung, pancreas, appendix or the stomach. Carcinoid tumours can also make your body create extra hormones or chemicals. The cancer in your body does not appear to make extra hormones.

## How is this cancer treated?

Hepatic Arterial I-131-Lipiodol Chemoembolization (HALCE) is one way to treat carcinoid tumours. The goal of this treatment is to slow down or stop the growth of tumours in the liver.

## Can HALCE cure the cancer?

HALCE does not cure the cancer. It can be very effective in making the tumour smaller or stopping its growth. When either one happens, the symptoms from the cancer are then reduced or stopped.

Many people with carcinoid tumour are able to return to work and do the activities they enjoy.

## What medicine is used in HALCE?

A mixture of a radioactive substance and chemotherapy is injected into the artery that goes to the tumour. This mixture then kills the cancer cells. The radioactive medicine is called I-131 Lipiodol.

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## How is HALCE done?

The following is a general description of the HALCE treatment. A nurse will give you more details when you are admitted to the hospital.

- A Radiologist will take a special x-ray to find the arteries in the liver.
- A flexible tube (catheter) is inserted into the large artery in the groin, usually the right side.
- The catheter is moved into the hepatic artery and the arteries going to the tumour(s).
- When the catheter is in the right place, a Nuclear Medicine Physician injects the medicine.
- After the injection, the catheter is removed and pressure is applied to the puncture site in the groin to prevent bleeding.

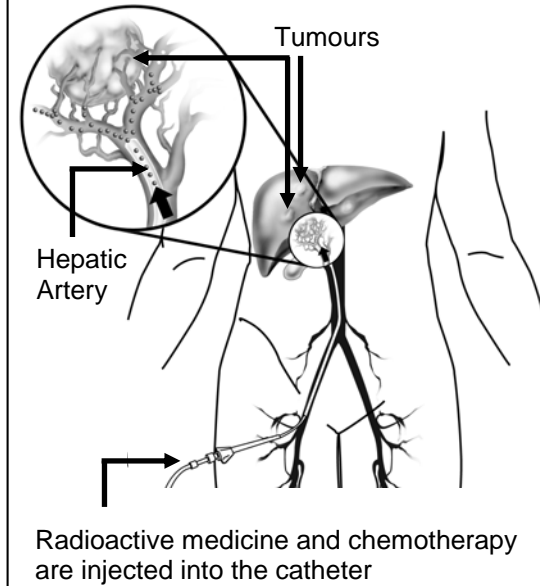
## What will happen the day before the HALCE?

You will be admitted to the hospital and blood tests will be done. A nurse will complete a history and review the medicines, vitamins and herbs you are taking. **You must tell the nurse if you use Sandostatin® daily or monthly.** Bring all of your medicines, vitamins and minerals in their original packaging with you to the hospital.

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## Hepatic Artery Chemoembolization



In the evening, an intravenous (IV) will be started and you will be given IV fluid overnight. You may not eat solid food after midnight, but you may drink fluids. Your groins will be shaved by your nurse. If you prefer, you may do this on your own.

## What will happen the morning of the HALCE?

You may be given Sandostatin® by injection. This medicine prevents or lessens symptoms that may happen during the HALCE.

A catheter will be inserted into your bladder, because you will not be able to

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move or go to the bathroom during and for 5 to 6 hours after the procedure. A second IV will be started for the pain medicine and the antibiotic. The antibiotic is to prevent infection and will continue for 4 days after the treatment is finished.

## What do I need to do during the HALCE?

You must lie very still. Wires will be taped to your chest and a blood pressure cuff will be put on your arm. This is to measure your heart activity and blood pressure during the procedure.

## What will happen after the HALCE?

You will go to the Recovery Room where you will be checked. After 2 hours, you will be brought back to your room. You must remain flat in bed with no leg bending for 5 hours or as ordered by the doctor.

## Will I feel pain?

Some people feel pressure or discomfort in the upper abdomen or in the area of their liver when the medicine is injected. You may feel heat all over your body.

You will have a pain medicine pump. By pressing a button, you will be able to give yourself the medicine you need to control the pain.

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