



Procedure Information Sheet

Introduction

Yttrium-90 microspheres are used to treat hepatocellular carcinoma and liver metastasis. Yttrium-90 are radioactive emitting pure β – radiation with a half-life of 64.1 hours.

The Operation / Procedure

1. The Procedure will be performed at the angiography suite under local anaesthesia.
2. The doctor will puncture the femoral artery, which is at the groin region, and place a temporary transfemoral catheter to access the hepatic artery and other tumour-feeding branches. Y-90 microspheres will be implanted via the catheter.
3. The catheter will be removed after the procedure. Pressure will be applied on the puncture site to stop the bleeding.
4. The procedure usually takes about 1-2 hours.

Before the Operation / Procedure

1. By signing the **Consent for Radioactive Isotope Treatment**, patient has expressed his/her consent for Yttrium-90 microsphere selective internal radiation therapy.
2. Your doctor will then arrange a hepatic angiography and a nuclear medicine scan called macroaggregated albumin scan (MAA) for patient to evaluate his/her physical fitness for Yttrium-90 microsphere selective internal radiation therapy. If patient is considered fit for this treatment, patient will be admitted to ward for treatment on another day considered appropriate by doctor.
3. After admission to ward, patient is not allowed to eat or drink until the procedure is completed.

After the Operation / Procedure

1. Patient is not allowed to eat or drink before being notified and permitted by the doctor.
2. After completion of the treatment, patient must be kept under observation in the ward until doctor considers his/her condition is stable to be discharged.
3. The following precautions should be observed for at least one week after Yttrium-90 microspheres treatment, unless specified otherwise:
 - 3.1 Avoid taking public transport for more than 1 hour if possible. Keep away from others at least 1 metre.
 - 3.2 Flush the toilet twice after use. If there is any spill of urine, ensure it is immediately cleaned. Wash hands thoroughly within the washroom after toileting.
 - 3.3 Do not kiss others and do not have sexual intercourse.
 - 3.4 Shower daily especially for the first 2 days. Rinse the bathroom thoroughly after use.
 - 3.5 Wash hands before preparing food.
 - 3.6 Drink plenty of water.
 - 3.7 Do not share food or drink with others. Do not share eating utensils or dishes with others.
 - 3.8 Refrain from going to crowded places. Do not stay closer than 1 metre with others for more than 3 hours.
 - 3.9 Avoid close contact with children and pregnant women for 2 weeks.
 - 3.10 For female patients: Avoid pregnancy and breast feeding for at least 3 months. Please consult doctor first before any plan of pregnancy.

⌈ Patient's Label ⌋

Patient Name: _____
Hospital No: _____
Episode No: _____

⌋



Risk and Complication

Common side effects of Yttrium-90 selective internal radiation therapy include:

1. Mild and transient nausea or vomiting (around 5-10%)
2. Mild transient pain at right upper quadrant of the abdomen (around 10%)
3. Radiation-induced liver injury (less than 10%)
4. Gastroenteritis or gastric/duodenal ulcer (less than 5%)
5. Fibrosis of the lungs (less than 1%)
6. Pancreatitis (less than 1%)
7. Secondary malignancy (less than 0.01%)

Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

Reference

University of Washington Medical Center:
 Interventional Radiology: Yttrium-90 Radiotherapy: Treatment for liver tumors (06/2019)

<p>Patient's Label Patient Name: _____ Hospital No: _____ Episode No: _____</p>

Patient's Signature: _____ Date: _____