Parathyroid Scan
In Nuclear Medicine

Test date______________________   Test time______________________

This test will be done in the Nuclear Medicine section of Radiology at UW Health – University Hospital. Enter through the clinic entrance. Go through the lobby to the 2nd floor atrium elevators. Go up to 3rd floor. Follow the signs to Radiology. Check in at the reception desk.

What is a parathyroid scan?

The parathyroid scan is a test that studies the thyroid and parathyroid glands. The purpose of this test is to find out which of the four parathyroid glands may be hyperactive before surgery to remove it. This test is most often done in one of three ways. Each method takes a different amount of time.

You will have an IV placed in your arm. A radioactive substance will be put in the IV. You may be asked to swallow a small capsule with a radioactive substance. This will help show the abnormal parathyroid gland. You will be positioned for pictures of your chest and neck. Your head will be tilted back slightly to keep your chin out of the picture. Your doctor will share the test results with you.

The three most common ways to image the parathyroid gland in Nuclear Medicine are listed here. The scan your doctor ordered is checked.

1. The scan with sestamibi

   We inject a small amount of technetium labeled sestamibi through the IV. Fifteen minutes after the injection, we take pictures of the thyroid and parathyroid glands for 35 minutes. Forty-five minutes later, another set of pictures is taken for another 35 minutes. The camera rotates around you for these pictures taking the full 35 minutes. The camera is close to you but does not make direct contact with you. It may brush up against your shirts sleeves. This is the most common scan used.

2. The scan with technetium subtraction

   We inject a small amount of thallium through the IV. After the injection, we take a single picture of the thyroid and parathyroid glands for about 20 minutes. Then, without moving you or the camera, we inject another small
amount of a radioactive substance called technetium. We take another single picture for about 15 minutes. The camera does not rotate for these pictures.

3. The scan with iodine subtraction

You swallow a small capsule that contains Iodine. Four (4) hours later, you return to Radiology. Check in again with the Reception desk. When you return, we take a single picture of the thyroid and parathyroid glands for about 20 minutes. Then, we inject a small amount of technetium labeled sestamibi through the IV. We take the same picture of the thyroid and parathyroid glands 30 minutes after the injection. The camera does not rotate for these pictures. Sometimes, we get more pictures. For these pictures, the camera rotates around you.

Our Nuclear Medicine doctor consults with your doctor about your history and problems to decide on the best scan for you. You will then be scheduled for the proper times.

How do I prepare for this test?

Please tell your doctor if you are pregnant. This test should only be done under special conditions if you are pregnant or breast feeding. There is nothing else you need to do to prepare for this test. You do not need a driver. You may follow your normal diet.

How will I feel after the test?
The test is painless, except for the minor discomfort of having an IV placed.

What are the risks?

Many people worry when they hear that the substances used in this test are slightly radioactive. The amount used in this test is so small that there should be no side effects and is not harmful to your kidneys. Again, it should be noted that this test should only be done under special conditions if you are pregnant or breast feeding.

Questions?

If you have any questions before the test, please call:
UWHC Radiology: Monday-Friday, 800 am - 4:30 pm, (608) 263-XRAY (9729) or Toll free 1-800-323-8942; ask for Radiology.