



UW Medicine

奧曲肽研究 如何做準備

奧曲肽研究是一項診斷性的核子醫學檢查。本資料解釋如何為此項研究做準備、此項研究如何起作用、此項檢查如何進行、在檢查過程中你會有些什麼感覺，以及如何獲得你的檢查結果。

什麼是奧曲肽研究？

奧曲肽研究是在“核子醫學部”進行的，用以診斷腫瘤。此項研究包括將一種稱為**示蹤劑**的放射性物質注射入你的血管。用於此項研究的示蹤劑叫做**銻-111 奧曲肽 (Indium-111 octreotide)**。

注射示蹤劑後，示蹤劑將被你體內的生長激素抑制因子受体所吸收。類癌腫瘤（惡性腫瘤，通常生長在消化道中）、多發性骨髓瘤（骨髓腫瘤）以及內分泌腫瘤（在胰腺中生長的腫瘤）都有大量這些生長激素抑制因子受体。

然後，使用一台 SPECT/CT 伽馬攝影機拍攝你身體的圖像。注射示蹤劑後，需要在 4 小時後、24 小時後，有時候在 48 小時後拍攝你身體的圖像。圖像將顯示出放射性示蹤劑被哪些部位吸收。這便能讓你的醫生看到任何腫瘤的大小和位置。

如何做準備？

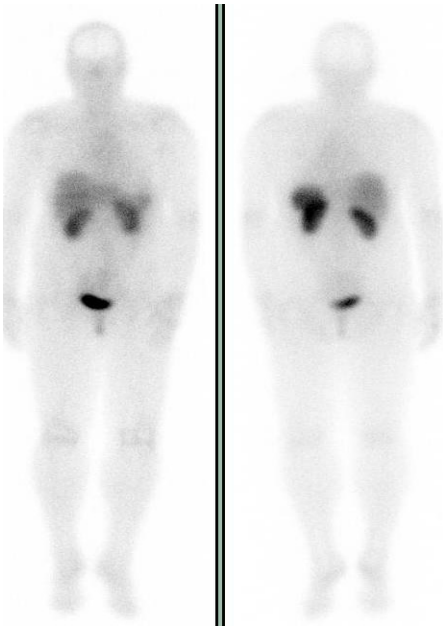
在做此項檢查之前，你**可能**需要停止服用某些藥物和/或停止你的生長抑素/奧曲肽治療。請諮詢你的醫生以獲取醫囑。

此外，你還需要：

- 在此項研究的整個過程中飲大量液體。
- 在注射示蹤劑的前一晚以及在拍攝圖像的每個晚上服食一種溫和的瀉藥。



在奧曲肽研究中，使用一台 SPECT/CT 伽馬攝影機拍攝你身體的圖像。



這是一張在奧曲肽研究中對病人拍攝的圖像實例。黑暗部分顯示出放射性示蹤劑被吸收的部位。

此項檢查如何進行？

- 當你到達診所後，放射技師將會向你解釋檢查的過程，並告訴你的主治醫生你已經在診所。
- 放射技師將一條靜脈注射管置入你的身體。向靜脈注入放射性示蹤劑。然後取出靜脈注射管。之後你便可以離開。

對於胰島素瘤患者

- 在研究開始前，先要檢查你的血糖水平。
- 在注射放射性示蹤劑之前和注射期間，將會給你喝一杯糖水，以避免你出現**血糖過低**（低血糖）反應。

4 小時後

你將在大約 4 小時後返回來拍攝身體的圖像。將對你進行全身掃描。你需要保持靜止不動的姿勢。

拍攝圖像需要大約 1 至 3 小時，取決於你的醫生需要拍攝什麼圖像。SPECT/CT 伽馬攝影機是非常安靜的。

在進行低劑量的 CT 掃描時，醫生可能還會要求拍攝 3 維圖像。

24 小時後

你要在第二天（大約 24 小時後）返回來拍攝更多圖像。這個部分大約持續 1 至 3 小時，取決於你的醫生需要拍攝什麼圖像。

48 小時後

注射示蹤劑約 48 小時後，**可能會**要求你回來再拍一次圖像。這次圖像拍攝也要持續大約 1 至 3 小時，取決於你的醫生需要拍攝什麼圖像。

在此項研究過程中你會有什麼感覺？

- 在此項研究過程中，大部分人會感覺正常。
- 胰島素瘤患者的血糖可能會降低。

誰為我解釋檢查報告的含義，以及我怎樣獲得我的檢查結果？

檢查完成後，核子醫學醫生將會審閱你的圖像，準備一份書面報告，並和你的醫生討論檢查結果。

之後，你的醫生將檢查結果告訴你，並和你討論你的治療方案。請諮詢你的醫生，以瞭解你是否需要重新服用你為做此項研究而停止服用的任何藥物。

有問題嗎？

你的問題很重要。如果你有任何問題或疑慮，請致電你的醫生或保健服務提供者。

- UWMC 成像服務熱線：
206-598-6200
- Harborview 放射科：
206-744-3105

Octreotide Study

How to prepare

An octreotide study is a diagnostic nuclear medicine procedure. This handout explains how to prepare for the study, how it works, how it is done, what you may feel during the study, and how to get your results.

What is an octreotide study?

An octreotide study is done in Nuclear Medicine to diagnose tumors. It involves injecting a radioactive substance called a *tracer* into your vein. The tracer used for this study is called *Indium-111 octreotide*.

After it is injected, the tracer is taken up by *somatostatin receptors* in your body. *Carcinoid* tumors (malignant tumors, usually in the digestive tract), multiple *myelomas* (bone marrow tumors), and *endocrine* tumors (tumors in the glands) have a lot of these somatostatin receptors.

Next, a SPECT/CT gamma camera will be used to take images of your body. This is done 4 hours, 24 hours, and sometimes 48 hours after you receive the injection. The images show where the radiotracer was taken up. This allows your doctor to see the size and location of any tumors.



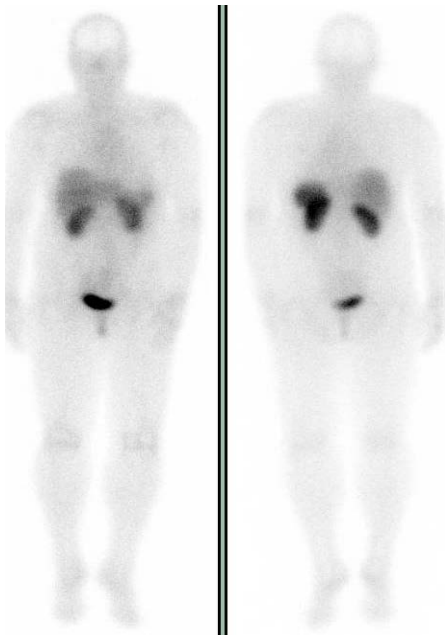
A SPECT/CT gamma camera is used to take images of your body in the octreotide study.

How do I prepare?

Before having this study done, you **may** need to stop taking some medicines and/or your somatostatin/octreotide therapy. Talk with your doctor for instructions.

You will also need to:

- **Drink plenty of fluids** throughout this study.
- **Take a mild laxative** the night before the injection and each night before imaging is done.



This is an example of images taken of a patient during an octreotide study. The dark places show where the radioactive tracer was taken up.

How is the study done?

- When you arrive, the technologist will review the procedure with you and tell your attending doctor that you are in the clinic.
- You will have an IV line placed. The radioactive tracer will be injected into a vein. The technologist will then remove the IV. After that, you may leave.

For Insulinoma Patients

- Your blood sugar level will be checked before the study begins.
- You will receive a sugar solution just before and while the radioactive tracer is given, to avoid a *hypoglycemic* (low blood sugar) reaction.

4 Hours Later

You will return about 4 hours later for images to be taken of your body. You will be scanned from head to toe. You will need to hold very still.

The imaging takes about 1 to 3 hours, depending on what images your doctor needs. The SPECT/CT gamma camera is very quiet.

The doctor may also ask for 3-D images to be taken, along with a low-dose CT scan.

24 Hours Later

You will return the next day (about 24 hours later) for more imaging. This session will last about 1 to 3 hours, depending on what images your doctor needs.

48 Hours Later

You **may** be asked to return for 1 more imaging session about 48 hours after the injection is given. This imaging session will also last about 1 to 3 hours, depending on what images your doctor needs.

What will I feel during the study?

- Most people feel normal during this study.
- Insulinoma patients may have a drop in blood sugar.

Who interprets the results and how do I get them?

When the test is over, the nuclear medicine doctor will review your images, prepare a written report, and talk with your doctor about the results.

After that, your doctor will talk with you about the results and your treatment options. Talk with your doctor to find out if you will need to restart any medicines that you stopped for this study.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

- UWMC Imaging Services: 206-598-6200
- Harborview Radiology: 206-744-3105