

患者及照顧者教育

# 關於使用 FDG 示蹤劑的 PET-CT 掃描

本資訊將幫助您為在 MSK 使用 FDG 示蹤劑進行正電子發射斷層掃描 (PET) 電腦斷層掃描 (CT) 作好準備。

# 關於使用 FDG 示蹤劑的 PET-CT 掃描

A PET-CT scan is an imaging procedure that is used to:

- Find cancer cells.
- Plan your treatment.
- See how your treatment is working.

You'll have a CT scan with a low dose of radiation at the same time as your PET scan. CT scans take a fast series of X-ray pictures. They're combined with your PET scan to create pictures of your soft tissues and bones.



You may also be scheduled for a diagnostic CT at the same time as your PET-CT. A diagnostic CT lets your healthcare provider learn more about your tissues, bones, and blood vessels. Ask your healthcare provider for the resource to help you get ready.

#### 示蹤劑

在進行 PET-CT 掃描前,您將接受一種名為「示蹤劑」的放射性藥物。 示蹤劑會依附於細胞和組織所使用的一種物質上。 癌細胞使用這種物質的方式與健康細胞不同。 示蹤劑的放射性部分可以讓保健提供者看到細胞如何使用這種物質, 從而協助其尋找癌細胞。

您的 PET-CT 將使用 FDG 作為示蹤劑。 您將透過導管(柔軟細管)注入示蹤劑。 導管可能是手臂、手部的靜脈注射 (IV) 導管,也可能是中央靜脈導管 (CVC)(如有)。

示蹤劑將由細胞使用,且不會在體內停留太久。 它主要藉由尿液排出體外。

#### **Oral contrast**

You will get oral contrast to drink before your scan. You'll be asked if you're allergic to iodinated contrast when you check in for your appointment. You'll get one of the following oral contrast solutions:

- Iodinated contrast (contrast with iodine)
- Diluted barium sweetened with saccharin

Both types of contrast work the same way and are used for the same purpose. Both are safe if you have diabetes.

You'll need to start drinking the oral contrast 45 to 60 minutes before your PET-CT. This will give the contrast solution time to move through your body.

# 為使用 FDG 示蹤劑的 PET-CT 掃描作好準備

### **Breastfeeding and pregnancy**

Tell your healthcare provider if you're pregnant or breastfeeding. This will help them plan your care.

#### **Diabetes care**

If you have diabetes, talk to your doctor who ordered your test. They will tell you how to manage your medicine before your PET-CT.

#### 取下皮膚上的裝置

您的皮膚上可能佩戴有特定裝置。裝置製造商建議您在掃描或手術前取下:

- 連續血糖監測儀 (CGM)
- 胰島素泵

請和您的保健提供者商量,盡量把預約安排至差不多需要更換裝置的日子。 請確保您有後備的裝置,供您在掃描或手術後穿戴。

您可能不確定在裝置關閉時該如何管理血糖。 如果是這樣,在您預約之前,請向為您管理糖尿病事宜的保健提供者諮詢。

# 進行使用 FDG 示蹤劑的 PET-CT 前一日該做甚麼

### Avoid doing some activities the day before

For 24 hours before your scan, avoid activity that uses a lot of energy or makes you repeat motions. This includes running, jogging, or cycling. These activities can lower the quality of the images from your PET-CT.

#### **Stay warm**

It's important to stay warm the day before and the day of your scan. When you get cold, it affects a special type of fat. Staying warm will keep the fat from making it harder for your radiologist to get clear images from your PET-CT. A radiologist is a doctor with special training in using imaging to diagnose and treat disease.

#### Follow these instructions:

- Avoid areas where you may become too cold.
- Keep your hands and feet warm at all times.
- In the winter, dress extra warmly. Wear hats, scarves, gloves, and extra layers.
- In the summer, avoid turning on your air conditioner very high.
- Bring a sweater with you to your appointment.

If you're getting anesthesia (A-nes-THEE-zhuh), read the "For people getting anesthesia" section at the end of this resource. Anesthesia is medicine to numb you or make you sleep.

# 進行使用 FDG 示蹤劑的 PET-CT 當日該做甚麼

在進行掃描前,避免進行耗費大量體力或需要重複動作的活動。

If you are not getting anesthesia, follow the instructions below. You may not be able to have your PET-CT if you do not follow these instructions before your procedure.

For 6 hours before you arrive for your scan:

- Do not eat anything.
- Do not chew gum or suck on hard candy, mints, or cough drops.
- You may drink only water.
- If you take medications, take them with water only.

如果您需要接受麻醉,請閱讀本資源末端的「接受麻醉人士的注意事項」部分。

### 到達後的預期情況

許多工作人員會要求您說出並拼寫自己的姓名和出生日期。 這是出於您的安全考慮。 姓名相同或相似的人士可能會在同一天接受手術。 進入該科室後,您將填寫一份簡短的問卷。

Your care team will prick your finger or draw blood from your arm to measure your blood glucose (sugar). It is measured in milligrams per deciliter (mg/dL). Your blood sugar level needs to be between 70 mg/dL and 199 mg/dL.

If your blood sugar level is 200 mg/dL or above, you may need to get insulin. Your scan may need to be rescheduled if your blood sugar level is above 200 mg/dL or below 70 mg/dL.

Your care team will inject the tracer into your vein. You'll wait about 60 minutes (1 hour) for your body to absorb the tracer. The amount of time depends on which area of your body will be scanned. You will also get contrast to drink at this time.

Try to relax and limit your movement during this time. You can sleep, read, listen to music, or watch videos while you' re waiting. Ask for a blanket if you feel cold.

If you're having a brain PET-CT, it's important to limit brain activity before your scan. Your nurse may tell you not to read or listen to music while you're waiting for your scan.

### 進行使用 FDG 示蹤劑的 PET-CT 掃描期間

When it's time for your scan, your technologist will bring you to the scanning room. They will help you onto the scanning table.

The machine looks like a large doughnut with a hole in the middle (see figure 1). This is the scanning ring (scanner). The scanner is about 3 feet (1 meter) deep.



Figure 1. PET-CT machine

Once you're on the scanning table, the table will move slowly through the scanning ring. You must lie very still until your scan is done. This can take 30 to 45 minutes, depending on the type of scan you're having.

If you're also scheduled for a diagnostic CT scan, you'll get a contrast infusion through your IV or CVC. An infusion is when medicine is slowly put into your bloodstream. This will happen after your technologist takes the first series of pictures.

To learn more, read.

# 進行使用 FDG 示蹤劑的 PET-CT 後該做甚麼

掃描完成後,除非有其他已預約的檢查或手術,否則可以立即離開。 您將獲發一張卡片,說明您接受了一項使用放射性示蹤劑的檢查,並註明檢查日期。 請隨身攜帶這張卡片,因為有些安全檢測設備能偵測到放射性物質,直到這些物質從體內完全排出。 通常不到一日即可排出。

掃描後記得保持充足的水分。 在接下來的一日,多喝水和其他液體,以助將示蹤劑排出 體外。 除非獲發其他指示,否則您可以立即恢復正常飲食。

與 18 歲以上的成年人相處是安全的。 您可以與他人相處,親吻、擁抱並撫摸他們。

在掃描後的一小時內:

- 請勿與孕婦或 18 歲以下的人士進行皮膚接觸。
- 請勿與孕婦或 18 歲以下的人士同床睡覺。

### 針對哺乳人士的指示

在掃描後停止哺乳 4 小時。 在此期間,您仍然可以擠奶(泵奶)。

然後,您可以選擇以下兩項操作:

- 丟掉泵出的母乳。
- 將泵出的母乳儲存 4 小時。 之後,即可使用該母乳餵哺寶寶。

在此期間,您可以用配方奶粉或掃描之前擠出的母乳餵哺寶寶。

### **Getting your results**

A radiologist will read your scan and send your results to your doctor. If your PET-CT was done to find cancer cells, your doctor should have your results in 2 business days. Ask your doctor how they will share your results with you. If your PET-CT was done to plan your treatment, your doctor will use the images to plan your care.

# 接受麻醉人士的注意事項

如您在進行 PET-CT 檢查時需要接受麻醉(讓您入睡的藥物),請遵循以下指示。

#### 進行 PET-CT 前一日該做甚麼

#### 安排陪同返家

療程後,你必須由一位負責任的照護夥伴陪同返家。負責任的照護夥伴須能協助您安全回家。如他們有任何疑慮,應該能夠聯絡您的護理團隊。請確保您在您的手術日前事先作出安排。

如果沒有負責的照護夥伴能陪你回家,則請致電以下代理。他們會派人陪你返家。他們會為此服務收取費用,而你需要提供交通工具。可以使用的士或汽車服務,但仍需有一位負責任的照護夥伴陪同。

紐約的代理	新澤西的代理
VNS 醫療(VNS Health):888-735-8913	照護他人(Caring People):877-227-4649
照護他人(Caring People):877-227-4649	

#### 進食說明



醫療程序前的午夜(凌晨12時)後請停止進食。包括硬糖和香口膠。

您的保健提供者或會就停止食用時間向您發出不同指示。 如果這樣,請遵循他們的 指示。 有些人在其醫療程序之前需要禁食(不吃東西)更長時間。

### 進行 PET-CT 當日該做甚麼

#### 飲用說明

從午夜(凌晨12時)至到達時間前的6小時,請僅飲用下列液體。不要飲食任何其他東西。

- 水。
- 透明的蘋果汁、葡萄汁或紅莓汁。
- Gatorade 或 Powerade。
- 黑咖啡或清茶。 可以添加糖。 不要添加任何其他東西。
  - 不要添加任何含量任何類型的牛奶或奶精。 包括植物牛奶和奶精。
  - 不要添加蜂蜜。
  - 不要添加調味糖漿。

如果您患有糖尿病,請注意這些飲品中的含糖量。 如果您飲用無糖、低糖或不添加糖的飲品,則會更易 於控制您的血糖水平。

到達時間前6小時,請勿飲用水以外的任何液體。

手術前保持水分很有幫助,因此如果口渴請飲用液體。 不要喝得過多。 手術期間,您將接受靜脈 (IV) 注



到達時間前2小時內停止飲用。包括水。

### **Contact information**

If you have any questions or concerns, call the Molecular Imaging and Therapy Service (MITS, or the Nuclear Medicine service) at 212-639-6652. You can reach a staff member Monday through Friday from 9 a.m. to 5 p.m. After 5 p.m., during the weekend, and on holidays, call 212-639-2000.

如欲獲取更多資源,請瀏覽 www.mskcc.org/pe,於我們的虛擬圖書館內搜尋。

About Your PET-CT with FDG Tracer - Last updated on September 4, 2024 Memorial Sloan Kettering Cancer Center 持有並保留所有權利