

# Computed Tomography

電腦斷層掃描



On your side 護您同行



Gleneagles

HONG KONG

港怡醫院

# Computed Tomography 電腦斷層掃描

## What is Computed Tomography? 電腦斷層掃描是甚麼？

A Computed Tomography or CT scan is a special examination using x-rays and special computers to produce cross-sectional images of the body, giving detailed information for diagnosis. The advanced multi-slice CT equipment which is installed in our facilities is capable of giving high-resolution scans at very short scanning time. With advancement in technology, the data can be reconstructed in various planes to produce 3D images with surface rendering for studies such as virtual colonoscopy, angiography and cardiac coronary vessels. More advanced application including brain perfusion as well as multiphasic studies can also be performed.

電腦斷層掃描是一種結合X光射線及高機能的電腦儀器來攝取身體各部位之橫切面造影的掃描技術，以提供詳細資料作醫療診斷用途。本院所裝置先進的多層電腦掃描系統能在短時間內攝取大量高解像影像。這些影像資料配以掃描系統的先進程式，能重組成不同層面以形成三維影像，像虛擬結腸鏡檢查，血管造影檢查及冠狀動脈心血管造影檢查等。我們也能利用更先進的電腦軟件程式，進行腦血流灌注和多相的檢查。



## Preparation for Computed Tomography 進行電腦斷層掃描前的準備

- | Patient should fast for about four hours if intravenous contrast (a medication that enhances and better define blood vessels and accentuate the appearance between normal and abnormal tissue in organs) injection is required.
- | Please inform staff if you have asthma or any history of allergies.
- | Please be punctual for your appointment.
- | 如您將要進行的檢查需要注射顯影劑，請於檢查前禁食四小時。顯影劑的作用是加強血管的影像並突顯正常細胞與異常細胞的不同。
- | 若您患有哮喘或曾對藥物或其他事物有過敏反應，請立即通知我們。
- | 請按預約時間準時到達部門。

## On the Day of the Examination 檢驗當天的過程

### Before the examination 掃描前

- | You will be asked if you have any history of asthma, allergies and kidney functions.
- | Informed consent will be obtained if intravenous contrast is required.
- | If the CT is to examine your abdomen, you will be asked to drink a bottle of water that will enable better visualization of the stomach and bowels. It may be necessary for you to wait while the water reaches the bowels. If the lower bowels are to be studied, we may require to administer contrast material by enema.
- | An intravenous injection catheter may be set up in preparation of the intravenous injection.

| 我們需要了解您是否患有哮喘、或曾對藥物或其他事物有過敏反應及腎功能等病歷。

| 如您需要經靜脈注射顯影劑，我們會預先讓您了解相關資訊，並經您簽署同意後，才會進行檢查。

| 在進行腹部檢查前，您需飲用少量清水以助清楚顯示胃和腸的狀況。如有需要，請靜待一會，讓水份到達腸胃才進行檢查。如需檢查腸的後半部份，我們有機會以灌腸方式注入顯影劑。

| 我們也會預先為您置入靜脈注射管以作靜脈注射之用。



**Free Shuttle Service 免費專車服務**

Gleneagles Hong Kong Hospital provides free shuttle bus service for public between MTR Ocean Park Station (Exit A) and the hospital (main entrance).

港怡醫院為市民提供免費專車服務往來港鐵海洋公園站（A出口）及醫院（正門）。



Free Shuttle Schedule  
免費專車服務時間表

**MTR 港鐵**



**Hospital address**  
1 Nam Fung Path,  
Wong Chuk Hang, Hong Kong

**醫院地址**  
香港黃竹坑南風徑1號

**Mainline 電話** +852 3153 9000  
**Service hotline 服務熱線** +852 2122 1333  
**Fax 傳真** +852 2528 0081

**www.gleneagles.hk**

 港怡醫院  
Gleneagles Hong Kong Hospital

# Computed Tomography 電腦斷層掃描





## During the examination 進行掃描時

■ You will be positioned on a padded table and moved into the scanner.

■ The radiographer will be able to see and hear you at all times.

■ You will be intermittently asked to stop breathing. It is important to follow the instructions given in order to ensure that the examination is successful.

■ If the intravenous injection is given, a warm sensation will be felt as the injection goes through the body. Some people report feeling a flush of heat or a metallic taste at the back of the mouth. These sensations usually disappear within a minute or two.

■ 您將被固定於掃描床上，再慢慢移進掃描儀器。

■ 放射技師會在控制室裡密切觀察您的情況，期間您也能通過揚聲器與他們溝通。

■ 放射技師會指示您間斷地屏住呼吸，請您必須遵照指示，以便能夠得到準確的影像。

■ 如有注射顯影劑，當顯影劑流進全身後，您可能會感到全身灼熱，或感到口腔有金屬味道等。這些感覺一般會於一至兩分鐘後消失。

## After the examination 完成檢查後

■ You can go home and resume normal activities after the procedure.

■ You can eat and drink normally.

■ If you have an injection of contrast you may be advised to slightly increase your fluid intake for the rest of the day.

■ If you are a diabetic taking Metformin we will speak to you about the possible need to stop taking Metformin for 48 hours after the scan.

■ 您可以回家並恢復正常活動。

■ 您可以正常飲食。

■ 如您有注射顯影劑，建議於檢查後輕微增加水份的攝取量。

■ 如您是一名正服用甲福明的糖尿病患者，我們會視乎情況建議您於完成檢查後的48小時內停服甲福明。

## How long will it take?

### 掃描需要多久的時間？

Depending on the parts to be examined, the total examination from preparation could be from 15 to 90 minutes.

檢查時間的長短取決於掃描的身體部位，一般需時十五至九十分鐘不等。

## When can you expect the results to be ready?

### 何時能得知檢驗結果？

Images will be reviewed by the radiologist to check that they are clear. The report will be sent to your doctor who will then discuss the scan results with you.

For further information, please consult your doctor or call our staff for assistance.

放射科醫生會檢視掃描影像以確保影像清晰。檢查報告將送到您的主診醫生，並由他為您解釋檢驗結果。如需更多資訊，請諮詢您的醫生，或致電予我們尋求協助。

## What are the benefits and risks?

### 電腦斷層掃描的益處及風險

#### Benefits 益處

■ Unlike other imaging methods, CT scanning offers detailed views of many types of tissue, including the lungs, bones, soft tissues and blood vessels.

■ CT scanning is painless, non-invasive and accurate.

■ CT examinations are fast and simple. For example, in emergency cases, they can reveal internal injuries and bleeding quickly enough to help save lives.

■ CT scanning can identify both normal and abnormal structures, making it a useful tool to guide radiotherapy, needle biopsies and other minimally invasive procedures.

■ CT has been shown to be a cost-effective imaging tool for a wide range of clinical problems.

■ 相比其他醫療造影的方法，電腦掃描能夠顯示許多不同組織包括肺、骨、軟組織及血管等的詳細影像。

■ 電腦掃描是一種無痛的、非侵入性而且準確的檢查。

■ 電腦掃描檢查簡單快捷。例如在緊急情況時，它可快速地檢查出內部受傷的部位或流血的位置以把握時間進行救援。

■ 電腦掃描可鑒定正常與非正常的組織，讓它成為進行放射性治療、針管抽取活細胞組織檢查及其它微創手術的有利工具。

■ 電腦掃描的經濟效用較好，在臨床診斷上被廣泛的應用。

#### Risks 風險

■ CT does involve exposure to radiation in the form of x-ray, but the benefit of an accurate diagnosis far outweighs the risk. The effective radiation dose from this procedure is small and varies with the type of examination

■ Women should always inform their doctor or nurse or radiographer if there is any possibility that they are pregnant.

■ Nursing mothers should wait for 24 hours after contrast material injection before resuming breast feeding.

■ The risk of severe allergic reaction is 1 in 10,000.

■ The risk of extravasation where injury to blood vessel causes leakage of contrast to surrounding tissues which may cause arm swelling, is 0.1% or 1 in 1,000.

■ 電腦掃描含有輻射，但其準確的診斷能力遠遠高於其潛在風險。它所需要的有效輻射劑量輕微，而有效輻射劑量亦會隨不同部位而調節。

■ 如女性病人有可能懷孕，應該立刻通知醫生、護士或放射技師。

■ 授乳中的女性病人需於注射顯影劑之後二十四小時才可繼續授乳。

■ 對顯影劑產生嚴重過敏反應的風險約一萬份之一。

■ 因外滲（血管因受損而導致顯影劑滲入周圍的肌肉組織）所引起手臂腫脹的風險約百分之零點一或一千份之一。

