

## 超聲波掃描檢查

### 簡介

超聲波是一種高頻音波，它的頻率遠高於人類可以聽到的範圍。它可以穿透人體皮膚和組織。

超聲波掃描利用這種音波，造出高解像度影像，檢視人體內部主要器官，例如肝臟、膽囊、胰臟、腎臟、子宮、卵巢和乳房等，診斷相關的疾病，如肝硬化、膽石、胰臟炎、腎石、腫瘤、血管狹窄及栓塞等。

此外，超聲波掃描可檢查孕婦胎兒的內臟結構及成長。在正常情況下使用超聲波掃描是不含輻射及無傷害性的，亦不會引起痛楚。

### 檢查前準備

- ◆ 上腹部檢查（如肝、膽等），需禁食六小時。糖尿病人請遵照醫生指示調節藥份
- ◆ 下腹部檢查（如腎、婦產器官），須多喝開水，令膀胱漲滿
- ◆ 其他部位檢查（如乳房、甲狀腺）：則無需特別準備
- ◆ 請穿簡單及寬鬆衣服
- ◆ 檢查時將衣物揭開，或換上指定之紫色袍

### 過程：

- ◆ 病人躺臥床上
- ◆ 放射科職員會將水溶軟膏塗在檢查的部位上
- ◆ 然後用超聲波儀器進行檢視，螢光幕上會即時顯現體內器官的影像。超聲波遇上空氣會被反射，不能繼續穿透體內的組織，水溶軟膏的作用是作為超聲波的介質，使超聲波可以穿透組織
- ◆ 為求影像清晰，病人可能需要控制呼吸或轉換姿勢，如側臥等。請盡量合作
- ◆ 有需要時，可能會做多張的影像記錄
- ◆ 整個檢查需時20分鐘至半小時或更長時間，視乎檢查部位及檢驗的困難程度而定
- ◆ 檢查完畢，請抹乾身體上的水溶軟膏後便可離開

### 檢驗後

- ◆ 檢查後，可以恢復正常飲食及日常活動
- ◆ 放射科醫生會將報告送交你的主診醫生

如有任何查詢，請聯絡主診醫生或放射科職員

以上資料由瑪麗醫院放射科提供。

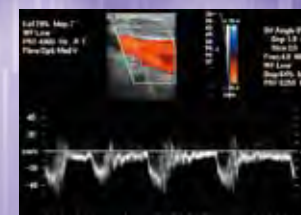


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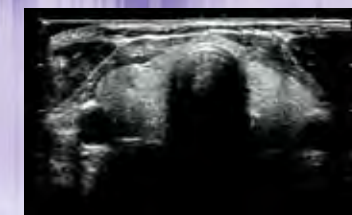
## 超聲波掃描檢查 ULTRASOUND




28 weeks fetal face profile  
二十八週胎兒側面



Femoral artery Doppler  
股動脈多普勒



Normal thyroid gland  
甲狀腺

 瑪麗醫院 Queen Mary Hospital	Pamphlet Topic & Department Code
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# ULTRASOUND

## Introduction

Ultrasound is high frequency sound wave, too high for human ear to hear. It can pass through the skin and tissues without being felt or heard. Ultrasound examinations use these high frequency sound waves to produce images of tissues in the body. Ultrasound examinations can help doctors detect many diseases. Ultrasonography of the gallbladder may show stones. An image of the breast, thyroid, liver, kidney, or pancreas may show masses. Ultrasonography of major blood vessels can detect vessel disease or clots.

Ultrasound examination of pregnant mother can help doctor to assess the condition of the baby inside the womb. Under normal clinical practice ultrasound examination is painless and harmless to our body.

## Preparation

Please follow the instruction of the appointment sheet

- ◆ Fasting for 6 hours is required before ultrasound examination of the liver

and gallbladder. For diabetic patient on drug, please consult clinician concerned for the adjustment of dosage

- ◆ For some examinations, you may be required to drink several glasses of water beforehand so that your bladder is full during ultrasonography
- ◆ Wear loose and comfortable clothing. You may be asked to change into an examination gown. You will need to uncover the skin over the area to be examined

## Procedure

- ◆ You will lie on a padded couch
- ◆ The radiological staff will apply gel to your skin over the area to be studied
- ◆ A hand-held transducer will be moved over the gel on your skin. Ultrasound waves do not travel well through air, and the gel is used to prevent air from interfering with the ultrasound waves
- ◆ You may be asked to lie still, and perhaps to hold your breath, so that clear ultrasound images can be obtained

- ◆ Multiple ultrasound images will be taken during examination for record
- ◆ An ultrasound examination takes 20 to 30 minutes to complete and may take longer for difficult examination
- ◆ When your examination is over, clean the gel from your skin and you may leave

## After the procedure

- ◆ You may go back to your regular diet and activities after this study
- ◆ The radiologist will report the findings to your doctor

Should you have any queries, please consult your doctor-in-charge

Information provided by the Department of Radiology, Queen Mary Hospital.