

# 診斷及介入放射部 Department of Diagnostic & Interventional Radiology

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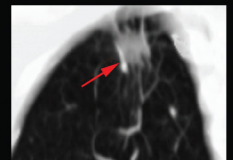
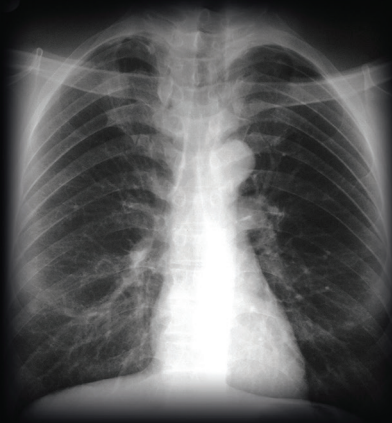
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DR.3151/H/E-03-082016

## Low Dose CT Thorax



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Lung cancer is the number one killer for men and women. It is well known that with advanced disease (stage IV), the 5 years survival is only 18%. With early disease (stage I), the 5 years survival is 70%. Common sense, therefore tells us that early detection of tumour is vital. Please note there is however, no data at the present time to say that early detection decreases mortality rate.

## Low Dose CT Scan of Thorax

This is a new tool to screen the high risk population, e.g. heavy smokers, for lung cancer. Early Lung Cancer Project (ELCAP) described in Lancet in July of 1999 serves as a valuable guideline. In this study which involved 1,000 patients, 2.7% lung cancers were picked up and 85% of these were stage I disease. On the same population, chest X-ray only picked out 0.7% of the cancers and only 17% was stage I disease. Therefore chest X-ray cannot be used to look for early lung cancer.

## How is Low Dose CT Thorax Performed?

A person having this screening test will be required to lie on the CT table. After positioning, one is required to take a single breath-hold for 5-10 seconds and the examination will be completed.

No fasting or injection of contrast is required.

## Who should have a Low Dose CT Thorax?

Smoking is one of the known causes of lung cancer. Every heavy smoker should consider having a Low Dose CT Thorax as a screening procedure. Patients with a strong family history may also consider having this test.

## What is the Radiation Dose from a Low Dose CT Thorax?

The radiation dose approaches that of a PA and lateral chest X-ray.

## What is the Accuracy Rate of Low Dose CT Thorax?

Detection of lesions measuring 5mm approaches 100%.

## What would I do with the Results?

If the test is negative, nothing further need to be done. The patient will follow the normal course of health check and have another Low Dose CT Thorax in the following year.

If a small nodule (less than 5mm) is detected, follow-up scans at 3, 6, 12 and 24 months are suggested to ensure that there is no change.

If the nodule is 5mm to 10 mm in diameter, a follow-up study at 3 months or a biopsy is suggested.

For Nodules greater than 10mm, a biopsy is recommended.