

## Lung cancer surgery

Lung cancer accounts for the largest number of cancer deaths in Hong Kong. Removing part of the affected lung, offers a good chance of cure for people whose cancer is at an early stage of infection (stage I & II).

Traditionally, open surgery is carried out to remove the cancer and affected tissue, or tissues. An incision of about 15-20cm is made in the chest wall so that the ribs can be spread apart to give the surgeon a direct view of what he is operating on.

Traditional thoracic (chest) surgery is safe and reliable but the patient needs to spend a longer recuperation period (between seven and 10 days) in hospital. The patient's rib pain may also make it difficult for him or her to take deep breaths which in turn could render him or her vulnerable to pneumonia if sputum is not drained from the lung.

Video-Assisted Thoracic Surgery (VATS), a technique developed in the early 1990s, is now also widely used and is as effective as open surgery for removing lung cancers. It requires smaller incisions – not more than six centimeters - to be made in the chest wall to provide access to the chest cavity without having to spread apart the ribs because a thoracoscope (a thin tube-like instrument which has a light and lens that enables the surgeon to examine the inside of the chest) and surgical instruments are inserted through the incisions.

The surgeon is guided by the images in the operation area, transmitted by the thoracoscope and video camera to help him performing the surgery.

VATS has advantages over open surgery. It reduces the patient's stay in hospital by half and allows the tube to be removed from the chest after two or three days. The recovery period is also shorter; the patient suffers less pain; and the scars are much smaller.

However, open surgery may be necessary when the tumour is large (over six cms) and when it has invaded the ribs, or when the tumour is too close to major blood vessels and other organs.