

### PET Scans Are Highly Accurate in Detecting Lung Cancer



*PET Scanner at work*

#### Lung cancer

is the most common and also the most lethal of cancers, striking both men and women. The incidence of lung cancer is rapidly increasing in industrialized countries and the five-year survival rate is disappointingly low. In Canada, there are 20,600 new lung cancer patients annually, with 2,550 of them in BC. The most effective treatment for lung cancer is surgery, but by the time the cancer is diagnosed, only about 20% of patients are candidates for this procedure. For those where the cancer has progressed too far, the options are palliative chemotherapy or radiation.

PET (positron emission tomography) is functional imaging. PET scans are the most accurate and effective imaging technique for early detection of

cancer and its spread. Used worldwide for years with impressive results, PET is now available in Vancouver. International medical literature establishes the value of PET for diagnosis, staging of disease and therapy control. PET provides unique information, which helps to improve the care of patients with lung cancer and significantly influences patient management decisions.

PET can differentiate between benign and malignant lung nodules and the extent of advancement of disease. It can detect distant metastases or the spread of disease and differentiate tumour recurrence from old scar tissue. PET provides significant information necessary to make the right decisions more accurately than any other imaging procedures.

The Vancouver PETSCAN

Centre, at the BC Research Building on the UBC Campus, has performed approximately 200 scans for lung cancer. Dr. Ken Evans, a leading Vancouver lung cancer surgeon, routinely requires a PET scan before performing surgery and has said that he will not do surgery without a PET scan first. Dr. Evans estimates that in 50% of his cases, decisions about surgery or alternative treatment are significantly influenced by the additional, unique information about the patient's condition obtained from a PET scan.

As an example of the power of PET in lung cancer, the PETSCAN Centre recently performed a PET scan on a patient, where after 9 months and 3 CT scans, his doctors were unable to determine whether there was cancer in the left lung, the site of a suspicious pulmonary nodule. The PET scan confirmed the existence of cancer, and also revealed that there was local spread to the left lymph nodes. The scan also determined that there was no distant metastases (spread). A subsequent biopsy confirmed what the PET scan identified and the doctors were confident that the appropriate treatment of the patient could finally now be implemented.

Next week's article will discuss the use of PET in breast cancer.

#### What Doctors Say about PET

*"[PET] has changed our management in 50% of the cases. I think that PET scanning is a state-of-the-art test for certain types of cancer in the body"*

Dr. Ken Evans, Thoracic Surgeon – Vancouver General Hospital

*"PET has become an established technology for the diagnosis, staging and restaging of a number of different cancer sites in the United States, Europe and in Asia."*

Dr. Simon Sutcliffe, Executive Director of BC Cancer Agency

*"PET scans can actually save the health system money by avoiding unnecessary surgeries, providing earlier detection of metastases and more accurate information about cancer tumours and how well, or if, the patient is responding to the therapy provided."*

Dr. Sandy McEwan, President of Canadian Association of Nuclear Medicine

**Full-body clinical PET scans are available at the Vancouver PETSCAN Centre.**



For more information call:  
**(604) 689-7776**  
Visit our website:  
**www.petscan.ca**

