

### PET Scan imaging is being used in Vancouver by cancer doctors



#### “PET” (Positron Emission Tomography)

scans are no more about your dog than a CAT scan is about your cat. A PET scan is the most accurate diagnostic imaging test available today for the early detection of cancer and its spread. PET is also used to monitor or determine the effectiveness of treatment.

PET is accepted worldwide as the best diagnostic imaging technology for most cancers. Its fundamental advantage over other tests, such as CT and MRI, is that it images and measures body function – the

absence or existence of disease and its progress – while CT and MRI show details about the structure of your body. By injecting a small amount of radiotracer labeled glucose, PET will detect metabolic abnormalities in the patient’s tissue cells. This is because diseased cells, such as cancer, absorb glucose in much higher amounts than the normal surrounding tissue. The radiotracer signals picked up by the PET camera are converted into images on a screen with the diseased areas showing up as “hot spots.”

The overall reliability and accuracy (“getting it right”) of PET is significantly better

in most cancer types than any other diagnostic procedures. It can:

- Help differentiate between benign and malignant tumours,
- Stage cancer by revealing the presence or absence of spread of cancer throughout the body (particularly useful in lung and colorectal cancer),
- Track treatment (chemotherapy, radiotherapy or the results of surgery) to determine whether it is working or has worked, and
- Show whether cancer has been eliminated or has recurred.

PET scan information is unique – it tells your doctor or specialist not just that there is something there, but what it is. PET will pick up disturbances in biological function often before physical changes can be seen. As a result, exploratory and often futile procedures, including surgery, can be avoided, and treatment better planned. In close to 50% of cases, a PET scan will significantly affect decisions as to the care of the patient.

PET scans are provided, on a doctor referral basis, at the Vancouver PETSCAN Centre. PET is not yet covered by BC’s Medical Services Plan, so the \$2,500 cost is paid by the patient or a third party. Next week’s article will tell you more about Vancouver’s PETSCAN Centre.

#### PET IMAGING CLARITY



PRE-TREATMENT IMAGE



POST-TREATMENT IMAGE

*Patient History:* 29-year-old male with a history of lymphoma, recurrent after chemotherapy and stem cell transplantation. After the initial PET showed extensive metastatic disease, patient underwent repeat stem cell transplantation. The follow-up PET scan shows a complete response to the transplant, indicating the disease is in remission.

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**

