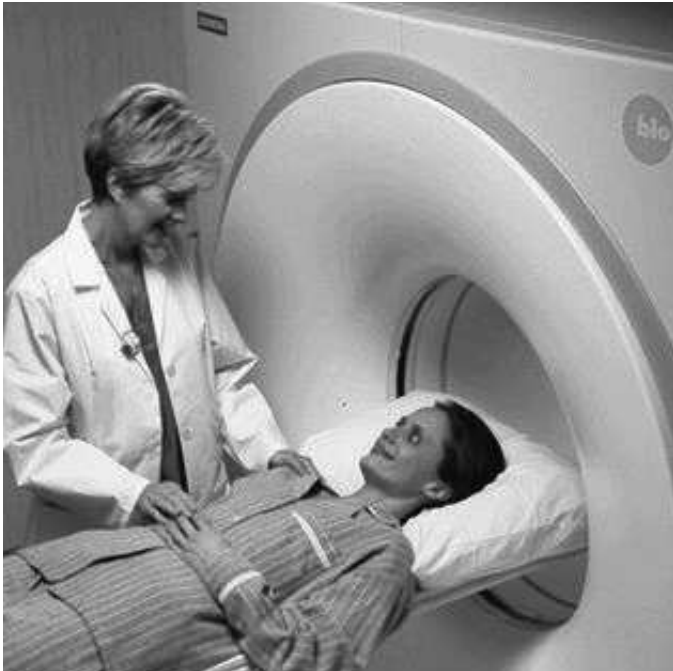


PET from a Surgeon's Perspective



“Despite significant advances in the use of new drugs and procedures in the fight against cancer, surgery remains the most effective procedure for the eradication of cancer. The circumstances, however, must be right and PET (positron emission tomography) is the best technology to determine that.”

A PET scan is a whole-body scan from the base of the skull to the knees to check for cancer. If the referring physician requests a head scan, that can be done as well. A PET scan looks at what is actually going on in the body (called “functional” or “metabolic” imaging), rather than just looking at bodily structure (“anatomic” imaging). PET is significantly better than CT or MRI at detecting cancer, its spread or recurrence.

This is important, because a surgeon needs to know before subjecting patients to such an invasive and traumatizing procedure, whether it will be effective. If a cancerous tumour is removed in one place, but has spread to other organs or parts of the body, the operation will have been futile and will only weaken the patient. Subsequent treatment, such as chemotherapy or radiation therapy, will be more stressful and potentially fatal for the patient. Surgery is

appropriate as long as the cancer is contained, or restricted, to a specific place in the body. For example, with lung cancer and melanoma (skin cancer) it is important to know whether the cancer has metastasized (spread) before deciding on the correct treatment.

Two lung cancer cases at the PETSCAN Centre illustrate the importance of a PET scan before deciding on treatment. One patient had a cancerous lung tumour the size of a fist, detected by other conventional imaging procedures. It was believed that, with such a large tumour, the cancer would inevitably have spread and that surgery would not be effective. In fact, the PET scan showed that the cancer had not spread, and was contained to the single tumour. Therefore, surgery was the right thing to do, and it was successful.

In another case, the tumour was so small it was felt that surgery to remove it would be the right procedure. The PET scan revealed that, unfortunately, cancer had erupted in other places, so that surgery to remove the one tumour would have been futile. Chemotherapy was chosen as the right treatment.

In a melanoma case, a large cancerous lesion near the knee suggested that amputation of the leg would be the right thing to do. A PET scan showed that the disease had spread and established at other sites, and amputation would have crippled the patient without eradicating the disease.

A Vancouver lung cancer surgeon puts it very directly: “Quite simply, PET scans are the best technology in the world today to check for spread of cancer.” ■

A PET Scan:

- Is safe and there are no side effects;
- Can replace multiple medical procedures with a single exam;
- Can reduce or eliminate futile or unnecessary treatments;
- Can help with the planning of, or entirely eliminate, surgery;
- Can validate or alter patient care;
- Is done in less than three hours;
- Provides interpretations within 48 hours to your doctor.

Previous Articles

In our series of articles about PET, we have discussed so far the following topics:

1. PET – General Introduction (June 8)
2. The Vancouver PETSCAN Centre (June 15)
3. Use of PET in Lung Cancer (June 22)
4. Use of PET in Breast Cancer (June 29)
5. Use of PET in Colorectal Cancer (July 13)
6. Use of PET in Melanoma (July 27)
7. Use of PET in Lymphoma (August 10)
8. PET and the Health Care System (August 24)
9. A Patient's Guide for PET Scans (Sept. 7)
10. Why Use PET? (Sept. 21)

If you didn't have a chance to pick up a copy of any of these issues, you can find the articles on the PETSCAN Centre's website: www.petscan.ca/news.htm

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



For more information call:
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