Imaging Healthcare
SPECIALISTS
imaginghealthcare.com

incontrast

Referring Physician Newsletter | Summer 2011

Providing Advanced PET/CT Imaging for Your Patients

Imaging Healthcare Specialists (IHS) provides advanced PET/CT imaging at two of its San Diego County locations.

PET stands for Positron Emission Tomography. A PET/CT scanner is a sophisticated integrated device containing both a CT scanner and a PET scanner with a single patient table. PET images are created after intravenous injection of a tiny amount of radioactive substance which is most often a special type of glucose called FDG. Glucose is taken up by all cells in the body, but is taken up to a greater degree by tissue with high metabolic activity such as cancer. CT provides detailed morphologic information about any abnormal tissue and accurately localizes the abnormality. The anatomic information provided by CT is combined with the metabolic information provided by PET into a single PET/CT imaging examination. FDG PET is also useful in the evaluation of certain degenerative neurologic conditions in the brain such as Alzheimer's Disease by identifying specific areas of decreased brain metabolism.

IHS is pleased to announce the availability of an exciting new PET/CT bone scan exam using Sodium Fluoride F-18 which is much more sensitive and specific than a conventional bone scan. Sodium Fluoride PET/CT is FDA-approved and Medicare patients can qualify to use Sodium Fluoride F-18 for cancer staging/restaging with help from the National Oncologic PET Registry (NOPR). IHS has participated in NOPR since 2006.

The new GE Discovery ST PET/CT scanner installed at our First and Laurel facility is capable of 2D and 3D imaging with a large bore for all patient studies or sizes. With its larger bore size (70cm) and shorter tunnel length (100cm), physicians have more flexibility in positioning larger and/or claustrophobic patients. This system provides physicians with more sensitivity, speed, high-definition (HD) resolution, and diagnostic confidence when treating cancer patients.

Additionally, the PET/CT scanner at Encinitas is currently being upgraded to provide HD capabilities (HD-PET/CT). The HD-PET/CT technology delivers clear, defined images with virtually no distortion, giving referring physicians a more consistent visualization from edge to edge. HD-PET/CT provides uniform spacial resolution over the entire field of view, improving the detectability of tiny lesions.

Integrating the Discovery ST scanner and HD-PET/CT imaging in our network is another example of our commitment to innovation and technology for early disease detection supporting physicians in improved diagnosis and treatment.

Radiologist Spotlight: *Dr. Mark S. Schechter*

Mark Schechter, M.D. is a Board-certified Diagnostic Radiologist and fellowship-trained Interventional Radiologist. He received a medical degree from Pennsylvania State University College of Medicine at Hershey Medical Center. He obtained his Diagnostic Radiology residency and Interventional Radiology fellowship both at UCLA. He has also obtained subspecialty CAQ certification from the American Board of Radiology in Vascular and Interventional Radiology. Dr. Schechter joined Radiology Medical Group in 1984 and has held several leadership positions including Chief of Radiology at Scripps Mercy Hospital and Radiology Medical Group President.

Dr. Schechter performs a wide variety of diagnostic and interventional radiology procedures including embolization therapies for cancer treatment and percutaneous treatment of uterine fibroids and vascular malformations. His strong background in oncologic diagnostic imaging and interventional treatment procedures has naturally led to a special interest in PET/CT. Dr. Schechter is lead medical group physician in PET/CT, and may be reached at 858-658-6500 or mschechter@imaginghealthcare.com.

About PET/CT Scan Technology

INDICATIONS AND BENEFITS

FDG PET/CT is commonly used to diagnose stage and/or restage a variety of cancer types. It is very useful in determining response to chemotherapy, radiation and/or surgery. Prior to the availability of PET/CT, when staging and/or restaging disease, medical, surgical and radiology oncologists could only rely on the presence of an anatomic abnormality on CT and MRI scans. In addition to providing anatomic information such as lesion size and location, PET/CT more importantly determines the metabolic activity of the abnormal tissue, or in patients who have responded to treatment, absence of metabolic activity within the abnormal tissue.

In patients with certain degenerative neurologic conditions of the brain, PET/CT can be useful in the diagnosis of Alzheimer's Disease and differentiation from other less common dementias such as Frontotemporal Dementia.

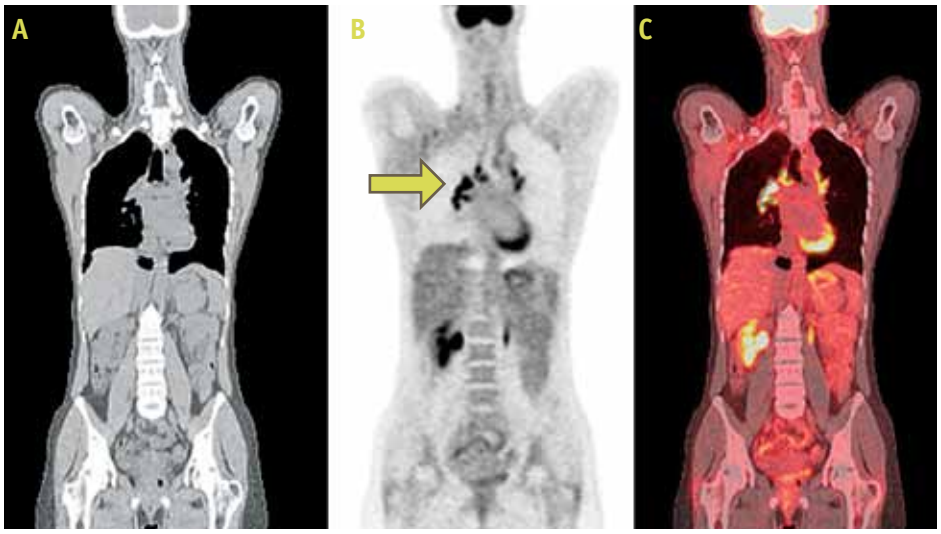
In regards to Sodium Fluoride PET/CT bone imaging, like a conventional bone scan, this PET/CT exam evaluates the skeletal system for presence or absence of metastatic disease. Scientific literature to date has clearly demonstrated the superiority of Sodium Fluoride PET images and greater sensitivity compared to conventional bone scanning in the detection of malignant bone lesions. CT provides greater specificity as well and permits differentiation of malignant and benign abnormalities. Typically, Sodium Fluoride will detect approximately twice as many lesions (both malignant and benign lesions) as bone scanning with a negative predictive value of virtually 100%. Indications and appropriateness for this exam are evolving, as is reimbursement. For Medicare patients with cancer diagnoses, this exam is covered under NOPR.

PROCEDURE

On day of procedure, the patient is fasted. The serum blood sugar is checked and an intravenous line is started. After the radioisotope is injected, the patient rests quietly for 30-45 minutes. The patient is then placed onto the scan table and a whole body CT scan is obtained. This scan is obtained with significantly lower radiation dose than a standard diagnostic CT scan because this scan is used only for attenuation correction and anatomic localization purposes.

Immediately after the CT, the patient table is moved into the PET portion of the integrated PET/CT device, and over the next 20-40 minutes the PET images of the body part of interest will be obtained.

For more information about PET/CT at Imaging Healthcare Specialists, please call (866) 558-4320 or visit us online at imaginghealthcare.com.



A. Coronal CT scan.

B. Coronal FDG PET image showing pathologic hypermetabolic hilar and mediastinal adenopathy (arrow). Physiologic myocardial and right renal urinary FDG activity also present.

C. Coronal fused PET/CT.

SAVE THE DATE

IMAGING HEALTHCARE SPECIALISTS

8th Annual Charity Golf Tournament

Benefiting Fresh Start Surgical Gifts

FOURSOMES STARTING AT $750

DATE:
Thursday, September 8th, 2011

LOCATION:
Coronado Municipal Golf Course

START:
12:30 Shotgun Start

Participate as a golfer, sponsor or dinner guest in what is sure to be another fun-filled day on Coronado with delicious food, prizes, and a touching presentation by Fresh Start. For more information, contact Heidi Rovello at hrovello@imaginghealthcare.com or 858.658.6577.