

November 23rd 2011

Newly Approved Technique Considered Breakthrough For Parkinson's Diagnosis At West Boca Medical Center

TO YOUR HEALTH

MARCI SHATZMAN MSHATZMAN@TRIBUNE.COM

Newly approved technique considered breakthrough for Parkinson's diagnosis

DaTscan, a diagnostic imaging technique that allows doctors to better diagnose Parkinson's disease from other movement disorders, was approved by the U.S. Food and Drug Administration in January.

Specifically, it was approved for use in the U.S. on Jan. 14, according to a spokesman for developer GE Healthcare, and West Boca Medical Center just announced the hospital is offering the procedure.

"Symptoms of Parkinson's disease are attributed to a decrease in dopamine in the brain, which causes muscle tremors, stiffness, and difficulty with movement and balance. Early in the disease when symptoms are slight, it is often difficult for physicians to differentiate between movement disorders based on clinical examination alone," according to the announcement. "The DaTscan, developed by GE Healthcare, is a substance that detects dopamine transporters in the brain.

"A patient is injected with the contrast agent and then undergoes a specialized scan. The scan captures detailed pictures of the brain's dopamine system and shows the presence of dopamine transporters. In patients with Parkinson's disease or another Parkinsonian syndrome, the scans show extremely low dopamine levels."

Rich Pilla, director of radiology, and Adel Mankarious, supervisor of nu-

continues on 16

continued
from 17

case medicine at West Boca Medical

Center, talked about DaTscan's use at the medical center.

Why is this important?

Pilla: It's a great tool for the neurologist. Without this test, the patients have to rely on a PET scan or clinical indications. With this test we can narrow that down significantly. We're allowing our neurologists to have one more tool to give the patients a definitive diagnosis. It's a peace of mind for the patient.

Mankarious: It has been used in Europe for more than 10 years [since 2000 according to the FDA website] and in 300,000 cases, and finally the FDA approved it. It's very good for the patients and the physician.

How does the test work?

Pilla: The person is injected with a radioactive isotope, similar to a thyroid uptake scan and PET and bone scans. The test uses this very common imaging technique that has a tag. The tag is targeted to the specific portion of the brain, the basal ganglia. There's a common uptake pattern seen in people with Parkinson's disease, compared

to a healthy brain or people who have essential tremors.

So this differentiates between patients who may have what you call "essential tremors," and people who may have Parkinson's disease?

Pilla: It's more targeted. A PET scan is a catchall. This is very specifically targeted to the basal ganglia.

If their neurologist orders this test, what's the preparation for the patient?

Mankarious: There's no preparation. They can eat, drink and take their medicine.

What happens next?

Mankarious: We administer one tablet of 130 milligrams of potassium iodine orally. It protects the thyroid, which would tend to pick up this isotope. We wait about one hour, then give them the injection of the DaTscan intravenously. They can go home and eat or drink. They come back in 3.5 hours for the scan.

They lay down on my table on their back and their head is in a special holder to minimize the motion to the head. The camera has two heads and we do the procedure that takes 15 hour. After that they're free to go home.