

YOUR ISOTOPE DAT (BRAIN) SCAN EXPLAINED

BEFORE

- **What is a DAT (Brain) scan?**

A DAT scan is a method of examining your brain to show conditions not seen on plain x-rays or MRI scans. It requires an injection of a small amount of radioactive scanning tracer, which is taken up by your brain. It takes approximately 3 to 4 hours for the injection to reach the brain, after which a scan will be taken. However you do not have to stay in the department during the 3 to 4 hours.

- **Do I need to prepare for the scan?**

YES Please inform us immediately if you are taking any of the following medications:

Amphetamine	Methylamphetamine
Benztropine	Dexamphetamine
Bupropion	Modafinil
Cocaine	Bupropion
Mazindol	
Methylphenidate	
Phentermine	
Sertraline	

Or if you think you may be allergic to iodine. (Shellfish etc.)

- **What about the radiation?**

The amount of radiation dose received is similar to that from having a back x-ray. However we do advise that close contact with expectant mothers and small children is minimised for the 18 hours after the injection (close contact would mean having a child sitting next to you or on your lap for more than ½ hour).

- **Is there anything I should tell the radiographer before the scan?**

Yes. Ladies we must perform this test within 28 days of the start of your last period if the appointment falls outside this please telephone the department. **If there is any chance that you may be pregnant or if you are breastfeeding please inform us before the injection.**

DURING

- **What does the procedure involve?**

On your arrival in the department, you will be given a small tablet to take. This takes one hour to take effect, before we can give you the scanning tracer. One hour after the tablet, you will be given a small injection into a vein in your arm (like a blood test). After this you will be free to leave the hospital to **return about 3 to 4 hours later** for your scan. Alternatively you may stay within the hospital until your scan, the choice is yours.

When you return, a camera will take pictures of your brain while you are lying on the scan bed. The scan takes approximately 45 minutes, and involves a camera rotating around your head, scanning as it goes. If you do not feel that this will be possible, please contact us immediately. You are not required to undress for this scan however we will ask you to remove any metallic objects such as ear-rings or necklaces.

AFTER

- **What happens after the scan**

You will be given another tablet to take home with you. This must be taken just before you go to bed.

You will then be able to leave the department.



Science News

DaTscan for Parkinson's: What Does it Mean?

- Jan 20 2011

Last week, the US Food and Drug Administration (FDA) approved the use of ioflupane iodine-123 injection or DaTscan, a contrast agent to be used with single-photon emission computed tomography (SPECT) for detecting dopamine transporters (DaT) in suspected parkinsonian syndromes.

What is DaT scan and what does it mean for you? PDF posed your recent questions to our Director of Research Programs, James Beck, Ph.D.

Q: What is DaTscan?

Dr. Beck: DaTscan is an imaging technology that uses small amounts of a radioactive drug to help determine how much dopamine is available in a person's brain. A machine similar to but smaller than an MRI machine, called a single photon emission computed tomography or SPECT scanner, measures the amount and location of the drug in the brain.

Q: Can DaTscan diagnose Parkinson's?

Dr. Beck: DaTscans cannot diagnose Parkinson's disease. These scans are used to help a doctor confirm a diagnosis. DaTscan has been used in Europe for over 10 years, where more than 300,000 have undergone the procedure. The results of a DaTscan can be used to help rule out other diseases that may have similar symptoms, like essential tremor, especially for individuals early in the course of their disease. However, there are several other diseases, multiple system atrophy (MSA) or progressive supranuclear palsy (PSP), which can also produce a loss of dopamine in the brain. A DaTscan cannot differentiate between those diseases and Parkinson's.

Q: What is the role of the DaTscan for people living with Parkinson's?

Dr. Beck: Currently, there is no objective test for Parkinson's disease. While the specificity and sensitivity of DaTscans are not 100 percent, the test can help doctors to confirm or refute their suspected diagnosis. DaTscans will therefore be helpful in people whose symptoms present an inconclusive or confusing diagnosis.

Q: Are there risks associated with DaTscan?

Dr. Beck: Possible adverse reactions such as headache, nausea, vertigo, dry mouth, and mild to moderate dizziness were reported, hypersensitivity reaction and injection site pain have been reported. Among the individuals who have undergone the DaTscan in Europe, no significant side-effects have been reported.

Q: I have Parkinson's / I am experiencing symptoms of Parkinson's. Should I get a DaTscan?

Dr. Beck: Likely no. Individuals who respond well to Parkinson's medication therapy and who have been diagnosed for many years will likely have an accurate diagnosis of Parkinson's disease. A DaTscan may be useful for those whose diagnosis is clinically uncertain or who have failed to respond well to common Parkinson's medication therapy. Every case of Parkinson's disease is different, so it is important to discuss it with your doctor.

Q: How can I get a DaTscan?

Dr. Beck: PDF recommends speaking with your doctor to see if a DaTscan is right for you. Those interested in learning more can visit <http://us.datscan.com/>.

Q: Is the DaTscan test covered by insurance, Medicare and Medicaid?

Dr. Beck: DaTscan will be covered by Medicare and Medicaid. Insurers are likely to cover Datscan but insurers vary, so please contact your insurer for more information.

Learn More:

How is Parkinson's diagnosed? Check out our Diagnosis page to find out.

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