What should I expect during the imaging examination?

Approximately 4 hours following the injection of 123I-Ioflupane, you will return to the facility for a 30 minute scan. You will lay flat on an imaging table while the gamma camera circles slowly around your head. There is no noise from the machine and no sensations at all during the scan. It is very important for you to keep your head as still as possible during the scan to avoid motion artifacts on the pictures. The technologist will explain the entire process to you.

Common Symptoms of Parkinsonian Syndrome (PS) and Essential Tremor (ET):

- Tremor (shaking) in one or more body parts when trying to remain still
- Balance problems
- Rigidity (stiffness)
- Slowness of movement and a shuffling walk
- Small, cramped handwriting
- Stiff facial expression
- Muffled speech
- Depression
- Dementia, memory loss
- Gait disturbance problems walking
- Difficulty sleeping
- Constipation
- Loss of smell.
**DaTscan** is a diagnostic nuclear medicine procedure that uses a Radiopharmaceutical to visualize specific areas in the brain. The test is indicated specifically for striatal dopamine transporter (DaT) visualization using SPECT nuclear imaging cameras to assist in the evaluation of adult patients with suspected Parkinsonian syndrome (PS). In patients with Parkinsonian syndromes, the density of the DaT injection absorption in the striatum of the brain progressively decreases in specific patterns. (This includes idiopathic Parkinson’s disease, multiple system atrophy (MSA), and progressive supranuclear palsy).

Following Intravenous injection of **DaTscan**, the active substance 123I-Ioflupane distributes to the striata in the brain, where it binds with high affinity to the presynaptic DaT protein. In adult patients with suspected PS, **DaTscan** may be used to help differentiate essential tremor (ET) from tremor due to PS. **DaTscan** is an **adjunct** to other diagnostic evaluations.

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**Q&A**

**What can I expect during a DaTscan?**

On the day of the exam, you will interview with the technologist who will explain the entire procedure to you as well as obtaining your medical history, current medications, and history of other diagnostic tests. In patients not taking a thyroid hormone replacement medication such as Synthroid, a thyroid-blocking agent will be administered to you approximately one hour before the administration of the **DaTscan**. Following the intravenous administration of the radiopharmaceutical, you may leave the office for approximately 4 hours and there are no restrictions on eating and drinking during this time. The **DaTscan** nuclear imaging involves acquiring a series of high resolution images of your brain. It will last thirty minutes and is extremely important that your head and neck are completely still during these pictures. The technologist will remind you about this before the imaging begins.

**How long will the test last?**

The entire test lasts approximately 6 hours from start to end with a 4-hour interval that you are able to leave the facility for lunch.

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**Are there any side effects from the Ioflupane I123 Injection?**

Some patients report a mild burning sensation while the injection is taking place. Otherwise there are only very rare side effects to the injection of the I-123 Ioflupane solution.

**What do I do if I suffer from claustrophobia?**

You are not totally enclosed within the imaging machine, but we suggest you request from your doctor’s office a relaxant to take prior to the scan.

**Do I have to stop any of my medications or are there any food or liquid restrictions prior to taking this test?**

You are advised to drink fluids prior to and following the **DaTscan** administration. This reduces your body’s exposure to radiation. There are no requirements to discontinue any medications prior to the exam and there are no eating or dietary restrictions. A written report will be sent to your physician upon completion of the exam. Your doctor will explain the results to you.