Brain DaTscan

How to prepare and what to expect

This handout explains a brain DaTscan: how it works, how to prepare, how the scan is done, and how to get your results.

What is a brain DaTscan?

A brain DaTscan is a nuclear medicine scan. It uses radioactive material to diagnose some diseases of the brain, especially those that cause tremor (shakiness).

DaTscan is a brand name for a drug called ioflupane I-123. A brain DaTscan is a form of radiology, because radiation is used to take pictures of the body.

This radioactive drug is ordered especially for you. Because of this, we need at least 72 hours’ notice if you must cancel or reschedule your scan.

Call 206.598.4240 at least 72 hours before your appointment if you need to cancel or reschedule your scan.

How does the scan work?

You will be given a small dose of tracer (radioactive material) through an intravenous (IV) line. This tracer will collect in part of your brain and give off gamma rays. A special camera called a gamma camera will use these rays to produce pictures and measurements of your brain.

How do I prepare?

For Women

If you are breastfeeding, or if there is any chance you are pregnant, please tell the scheduler or technologist (the person who will help you prepare for your scan).

Drugs to Stop Taking

Some drugs will affect the results of your brain DaTscan. You must stop taking these drugs before your scan.
The table below lists drugs that need to be stopped, and for how long before your scan. The list is in alphabetical order by the generic name of the drug. Common brand names are listed after the generic name.

**Please talk with your doctor who prescribed the drug to confirm these instructions.**

<table>
<thead>
<tr>
<th>Drugs to Stop</th>
<th>When to Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamines: Adderall, Dexedrine, Dextrostat, ProCentra, Vynanse</td>
<td>7 days before</td>
</tr>
<tr>
<td>Benztropine: Cogentin</td>
<td>5 days before</td>
</tr>
<tr>
<td>Bupropion or Amfebutamone: Aplenzin, Budeprion, Voxra, Wellbutrin, Zyban</td>
<td>8 days before</td>
</tr>
<tr>
<td>Cocaine</td>
<td>2 days before</td>
</tr>
<tr>
<td>Dexamphetamines: Dexedrine, Dextrostat, Liquadd, Procentra</td>
<td>7 days before</td>
</tr>
<tr>
<td>Ephedrine</td>
<td>1 day before</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>5 days before</td>
</tr>
<tr>
<td>Isoflurane</td>
<td>1 day before</td>
</tr>
<tr>
<td>Ketamine</td>
<td>1 day before</td>
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<tr>
<td>Mazindol: Mazanor, Sanorex</td>
<td>3 days before</td>
</tr>
<tr>
<td>Methamphetamines: Methampex, Methydrine, Pervitin, Temmler</td>
<td>3 days before</td>
</tr>
<tr>
<td>Methylphenidates: Concerta, Metadate, Methylin, Ritalin</td>
<td>2 days before</td>
</tr>
<tr>
<td>Modafinil: Provigil</td>
<td>3 days before</td>
</tr>
<tr>
<td>Phencyclidine: Phenylcyclohexyl piperidine (PCP)</td>
<td>14 days before</td>
</tr>
</tbody>
</table>

**How is the scan done?**

- When you first arrive, we will ask you to drink a small cup of water with potassium iodine in it. This water may have a metallic taste.

- An hour after you drink the potassium iodine water, the technologist will inject a small amount of tracer into a vein in your arm or hand through your IV.

- You must stay in the department for 30 minutes after the injection.

- You will then have a break for 3 hours. It is OK to eat and drink during this break.

- You must return to the clinic after this 3-hour break to have images of your brain taken.
• Then, 4 hours after you receive your tracer injection, the technologist will take images of your brain with the gamma camera. You will lie flat on the exam table while these images are being taken.

• You must not move while the camera is taking pictures. If you move, the pictures will be blurry and may have to be taken again.

• Taking the images will take 40 to 45 minutes. Your total time in the imaging room will be about 1 hour.

• You may also have a low-dose CT scan of your brain to help confirm any results. A CT scan is another way to take images inside your body.

• It will take about 5½ hours from the time you drink the potassium iodine water until the scans are complete.

What will I feel during the scan?

• The technologist will help make you as comfortable as possible on the exam table for the scan.

• You may feel some minor discomfort from the IV.

• Lying still on the exam table may be hard for some patients.

• The camera will be close to your head. This may make you feel confined or uneasy (claustrophobic). Please tell the doctor who referred you for this scan if you know you are claustrophobic.

Are there any side effects from the scan?

• Most of the radioactivity from the tracer will pass out of your body in your urine or stool. The rest simply goes away over time.

• Bad reactions to this scan are very rare. Fewer than 1% of patients (fewer than 1 out of 100) have a bad reaction. Reactions may include headache, nausea, vertigo (dizziness), or dry mouth.

How do I get the results?

When the test is over, the nuclear medicine doctor will review your images, prepare a written report, and talk with your doctor about the results. Your doctor will then talk with you about the results and your treatment options.

If you needed to stop taking any medicines on the day of your scan, ask your doctor when to start taking them again.