Yes, a CT scan will clearly show a **Deep Brain Stimulation (DBS)** device.[1] In fact, CT scans are the preferred tool for surgeons to verify that the leads are placed correctly in the brain after surgery.

While CT scans are generally safe for people with DBS (unlike MRIs, which involve powerful magnets), they can sometimes cause discomfort or pain for specific reasons.

Why a CT Scan Shows the Device

The metallic components of the DBS system—specifically the **leads** in the brain, the **extension wires** under the skin, and the **Internal Pulse Generator (IPG)** in the chest—are dense and appear very bright on a CT scan.

- **Lead Placement:** Doctors use CT scans to ensure the electrodes are at the exact millimeter target required to treat your symptoms.
- **Artifacts:** Because the device is metal, it can create "artifacts" (bright streaks or starburst patterns) on the image.[2] Radiologists are trained to look past these to see the brain tissue underneath.

Why It Might "Hurt" or Feel Uncomfortable

It is rare for a CT scan to be truly painful, but patients often report unusual sensations that can be distressing:

1. Electromagnetic Interference (EMI)

As the X-ray tube rotates around you, the radiation can interfere with the electronic circuit of your neurostimulator. This interference can cause the device to deliver a brief, unintended **"jolt" or "shock" sensation**. Some patients describe this as a sharp tingle or a sudden burst of stimulation that can feel painful or startling.

2. Increased Stimulation

In some cases, the radiation can briefly cause the device to "fire" more than intended. If your stimulation settings are already high or if the device is near a sensitive nerve, this temporary increase can feel like a sharp throb or a "pulling" sensation in the face or limbs.

3. Tenderness at the Surgical Site

If your DBS was recently implanted, the areas where the leads were inserted into the skull or where the battery was placed in the chest will be tender. Lying flat on a hard CT table or the slight vibrations of the machine can irritate these healing incisions.

4. The Stereotactic Frame

If the CT is being done *during* the surgical process, you might be wearing a "halo" or stereotactic frame.[3] The pressure from the frame or the pins used to hold it in place is a common source of significant discomfort during the imaging process.

How to Minimize Discomfort

If you need a CT scan, follow these standard safety steps:

- **Turn the Device OFF:** Most manufacturers recommend turning your DBS system **OFF** using your patient programmer before the scan begins.[4] This significantly reduces the risk of interference and "shocks."

- **Notify the Technician:** Always inform the radiology staff that you have an implanted device. They can often adjust the "scan range" to avoid passing the X-ray beam directly over the battery in your chest unless it's medically necessary.
- **Bring Your Programmer:** Always have your patient controller with you so you can turn the device back on and check its status once the scan is finished.

Would you like me to look up the specific CT safety guidelines for your particular brand of DBS (e.g., Medtronic, Boston Scientific, or Abbott)?