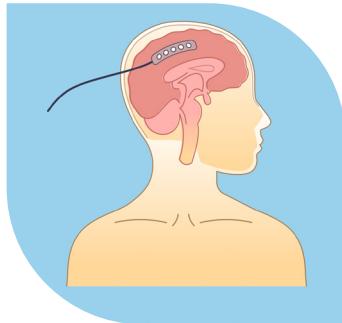


Strips and Grids [Subdural Electrodes-SDG]

Strips and grids are used to record electroencephalography (EEG). These types of electrodes are implanted on the surface of the brain and may vary according to the area to study.



Some electrodes are grouped in a column known as strips and others are grouped in rows and columns known as grids. The strips are implanted via small holes drilled into the skull (burr holes). For grids, it requires a larger surgery to remove a small portion of the skull (craniotomy). Some patients may have a hybrid surgery using strips and grids, but it is rarely needed.

These procedures can be done asleep with general anesthesia but when it is required to interact with the patient, the procedure will be done with local anesthesia.

The electrodes are left on the brain from a few to several days. During this time, you will stay at the hospital in the epilepsy monitoring unit (EMU) and be under continuous monitoring by the multidisciplinary team. The electrodes are connected to computers allowing the team to record and analyze the activity of a specific area of the brain. The length of stay in the EMU will depend on how long it takes to see all the seizure types and the necessary data that has been collected for a particular seizure.

Once enough data has been gathered by the multidisciplinary team, a second surgery will be scheduled to remove the electrodes.

This technique has almost entirely been replaced with Stereo-electroencephalography (SEEG), but it is occasionally used to study the anatomy and function of the brain.

Strips and grids, same as SEEG, are safe procedures; however, it is important to understand that they may carry potential risks. Bleeding is a major risk, and it is difficult to leave electrodes implanted for too long due to infection risk.

Benefits and risks should always be discussed with the surgeon and healthcare professionals in the team.

Learn more at

ItsYourEpilepsy.com

Frequently Asked Questions about Strips and Grids

Q. Do strips and grids procedures hurt?

A. Almost not at all; however, the craniotomy for grids may be somewhat larger, and the area may be tender.

Q. Can you feel the strips and grids?

A. You cannot feel the strips and grids directly. They are placed between the skull and the brain.

Q. What happens if you don't have a seizure during the monitoring period?

A. The goal is to evaluate seizures. That's the reason why the length of stay in the EMU may vary. If you don't have a seizure at all, other types of tests can be used.

Q. Do I have to shave my head?

A. This is a good conversation to have with the neurosurgeon and the team, to learn how much you must shave and to understand the reasons why you must shave your head.

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