

Corpus Callosotomy

Candidates for this type of surgery are people with severe, generalized, and uncontrollable seizures that affect both hemispheres (right and left sides) of the brain.



Corpus callosotomy is a safe and effective surgery. This technique has been performed since the 1940's and has been refined throughout the years. The procedure has evolved allowing surgeons to apply modifications to the surgery according to how the seizures spread and which areas are affected. These modifications include anterior callosotomy, posterior callosotomy and partial callosotomy. During surgery, the surgeon will get access to your brain through a cut in your scalp and by removing a piece of your skull and dura [membrane covering the brain]. In order to have a better view of the structures in the brain, the surgeon will use a microscope and special instruments designed for these types of surgeries.

The main goal is to cut the corpus callosum, a thick structure comprised of nerve fibers that connects the two hemispheres. The indications to use either one of the modifications previously mentioned, vary according to the location and extent of the corpus callosum to disconnect. This procedure will make seizures difficult to spread between the hemispheres. At the end of the surgery the piece of skull and dura will be put back in place and the scalp will be closed with stitches. You will be transferred to the ICU for continuous observation. After a few days, you will go to a hospital ward or to a rehabilitation unit to enhance recovery from surgery. When you go home, it is important to schedule follow-up appointments with the specialists. The doctors may recommend continuing taking anti-seizure medications. You will be able to return to regular activities after a few weeks; but remember, recovery is different for everybody.

Any surgical treatment for epilepsy has potential risks, which will be evaluated carefully to determine the benefits of the procedure. Leg weakness and loss of coordination are the most common ones. Other potential risks include bleeding, infection, and stroke. No weakness or neurological deficit is expected after the surgery, but in the rare case of a complication, further admission to rehabilitation may be required. Benefits and risks should always be discussed with the surgeon and healthcare professionals in the team.

Learn more at

[ItsYourEpilepsy.com](https://www.ItsYourEpilepsy.com)

Frequently Asked Questions about Corpus Callosotomy

Q. Is corpus callosotomy available for children?

A. Yes, it is.

Q. Is there another surgery that backs this procedure up, if it fails?

A. Yes. Neurostimulation (either DBS or VNS) are also options after this procedure. If there is an epileptogenic area that can be removed, lobectomy or RNS may be other options.

Q. What are the limitations after surgery?

A. The surgery does not remove seizure focus or stop seizures from occurring (in most cases). It simply stops the spread of seizures between the two hemispheres.

Q. How is my brain affected after removing part of it?

A. The communication between the two hemispheres of the brain is reduced; however, this is difficult to notice without neurophysiological testing.

Q. Will I be and feel the same after a corpus callosotomy?

A. For the most part, there are very few noticeable effects from the procedure on normal brain function. Some shared functions between hemispheres may be affected, however, these are rarely noticeable.

Collaborator

Michael Kogan, MD, PhD

Associate Professor & Director of Functional and Epilepsy Surgery

University of New Mexico, Department of Neurosurgery

07/2022

CONTACT US

Email: Info@ItsYourEpilepsy.com

Web: www.ItsYourEpilepsy.com

ITSYOUREPILEPSY.COM



VERSION 1_7/2022