

At 9 months old, this girl had half her brain removed — and 15 years later, she is thriving.

In most people, speech and language live in the brain's left hemisphere. Mora Leeb is not most people.

When she was 9 months old, surgeons removed the left side of her brain. Yet at 15, Mora plays soccer, tells jokes, gets her nails done, and, in many ways, lives the life of a typical teenager.

"I can be described as a glass-half-full girl," she says, pronouncing each word carefully and without inflection. Her slow, cadence-free speech is one sign of a brain that has had to reorganize its language circuits.

Yet to a remarkable degree, Mora's right hemisphere has taken on jobs usually done on the left side. It's an extreme version of brain plasticity.

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Most of the cells in her left hemisphere had died. The ones that remained were causing her unrelenting seizures. So the Leeb family traveled from their home in South Orange, New Jersey, to the Cleveland Clinic, where [Dr. William Bingaman](#) performed a [hemispherectomy](#), which removes most of the tissue on one side of the brain.

"Basically the surgery created a newborn," Leeb says. "She could no longer roll over. She could no longer smile. It was almost like a restart."

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