



24
hours
video EEG
monitoring

6
hour long
resective
epilepsy
surgery

50
seizures
in a day

**SEIZURE
FREE**



From more than
50 SEIZURES IN A DAY,
this infant is now
SEIZURE-FREE

Bhabik was experiencing seizures since birth and often more than 50 times in a day.

This 6 weeks' old baby from Nasik was referred to the Paediatric Neurology Department of SRCC Children's Hospital, managed by Narayana Health, when multiple anti - seizure medications became ineffective in controlling the daily episode of numerous seizures.

After having a thorough clinical investigation followed by MRI scans, EEG and ECHO, the paediatric epileptologist arrived at a diagnosis of TUBEROUS SCLEROSIS COMPLEX.

She recommended administering vigabatrin, a precision treatment for epilepsy associated with TSC. But seizures continued. Moreover, Bhabik started showing signs of developmental delay.

When the paediatric neurologist went for further investigation and studied the pattern and the signs of the seizure, the semiology suggested that the **seizures were originating from the large tuber in the infant's brain.** A **24-HOUR VIDEO EEG MONITORING** confirmed the same along with the previous hypothesis that Bhabik had a surgically remediable epilepsy.

The next challenge was this tuber's location - which was on the right lobe that controls movements of entire left side of the body.

Given the small age, most of the functional tests to understand how much motor function was being controlled from the tuber, could not be performed.

The surgery to attempt was not only complex but difficult as well from multiple perspectives -

- **location of the tuber**
- **very young age (7 months)**
- **weight of the child**

making anaesthesia for a long brain surgery very challenging.

The risk of paralysis post-surgery was even weighed against the poor seizure freedom in case of an incomplete removal of the tuber.

After discussing with the parents, decision was taken in favour of the surgery.

A team of paediatric neurosurgeon and paediatric neurologist performed a RESECTIVE EPILEPSY SURGERY along with multiple intraoperative monitoring tests - ECoG for seizures, MEPs for motor function, brain ultrasonogram and neuronavigation guidance amongst others.

These tests were crucial to define the area causing seizures from the area controlling motor function. The surgery was performed over 6 long hours. Baby was admitted to PICU postoperatively for a day for neuroprotection.

The surgery was successful and the child is now SEIZURE-FREE, down to 0 seizure a day from 50 plus seizures a day.

Bhabik had minimal transient paralysis which started improving even before discharge from the hospital. Postoperative EEG was also normal. His interactive response improved, he started looking and smiling to name.

Dr. Pradnya Gadgil

Paediatric Neurologist & Epileptologist

Expertise:

- Complex Epilepsy (Difficult to control Epilepsy)
- Epilepsy surgery
- Tuberous Sclerosis Complex

Dr. Saurav Samantray

Paediatric Neurosurgeon

Expertise:

- Epilepsy Surgery
- Oncology (Brain and Spine tumours)
- Spina Bifida (Dysraphisms)
- Hydrocephalus
- Craniosynostosis
- Spasticity
- Vascular surgery

Only 2 of 1,000 epilepsy patients in India opt for life-altering surgery

TIMES NEWS NETWORK

Mumbai: It's typical for a seven-month-old child to grab a toy dangling in front of him, but Bhavin's parents were euphoric when he recently put out his right hand. It had taken a six-hour brain surgery on the six-kilo child, who was then six months old, to restore activity to his right hand and leg. Bhavin suffered from epileptic seizures which started the day he was born in Dhulia in June 2022. His parents took him to several doctors in different cities before reaching NH SRCC Children's Hospital, Haji Ali, where he was operated on in January.

In a country where epilepsy surgery is a rarely utilised option (only two out of every 1,000 eligible patients opt for it), Bhavin is a part of a small group whose lives have changed drastically post-surgery. (Surgery is the last resort when medications – sometimes eight a day – fail.)

"It was clear the day Bhavin came to us that he was suffering from tuberous sclerosis, a rare genetic disease that

IOM+ SUFFER FROM DISORDER

EPILEPSY

> Epilepsy is a neurological disorder in which nerve cell activity gets disrupted

> Patients get seizures or short spells of unusual behaviour, sensations or loss of consciousness

> Over 10 million Indians have epilepsy

TUBEROUS SCLEROSIS

> Tuberous sclerosis causes benign tumours (in brain, skin, kidneys, heart, eyes, lungs)

> It could be mild or cause serious disabilities

> Patients with growths in the brain may get seizures



The seven-month-old undergoing neurological examination after the surgery

causes seizures," said neurologist Dr Pradnya Gadgil from SRCC Hospital. He was put on medicines, but seizures reduced from 50 to nine. "Ever since the surgery, he hasn't had a single seizure," said Dr Gadgil. In Kuria, 27-year-old Smita is enjoying a seizure-free life for the first time in years after undergoing surgery at KEM Hospital, Parel, in April 2021. "I used to take seven to eight tablets daily, but my parents and in-laws urged me to undergo surgery," she said. She has to take a few pills for an-

other year, but she has no seizures and is preparing for Class XII exams. "I want to complete graduation," she said. Jalgaon resident Navin, who couldn't step out of home for three years due to frequent seizures, is pursuing a pharmacy degree after undergoing surgery at KEM Hospital in 2018. "His attacks began with a smile before his face drooped towards the left and he would become unconscious," said his father, a primary school teacher. "We couldn't let him out of sight earlier, but

he now rides a bike and travels on his own," he added.

Neurologist Dr Sangeeta Ravat, dean of KEM Hospital, said, "Surgery is life-altering for patients, yet very few surgeries take place in India. Many patients thus lose a golden opportunity for cure in their formative years." One of the reasons, she said, is the "surgical deficit" with less than 50 centres offering the surgery. Less than 1,000 surgeries take place in a year in India, which is home to over 10 million epilepsy patients.

Epilepsy surgery isn't a cakewalk. In Bhavin's case, Dr Gadgil found a benign tumour in the brain centre controlling movements of the body's right side. "Tuberous tumours don't stand out like normal tumours. A surgeon has to use a neuro-navigation guidance to decide how much he has to cut," said paediatric neurosurgeon Dr Saurav Samantray who operated on Bhavin. Doctors were worried he would be left paralysed. "But it's worth the chance; he is active now," said his parents.

THE TIMES OF INDIA

The team now plans to start working on the neurodevelopment – using the precious window of opportunity given by the seizure freedom for his brain to develop skills such as walking, speech etc.

Appointments

1800-309-0309



Emergencies

022-71222333

📍 1A, Haji Ali Park, Mahalaxmi, Mumbai

🌐 www.narayanahealth.org