

Rwanda has begun performing epilepsy surgery for the first time, marking a major milestone in the country's healthcare system and offering new hope to patients who have lived for years with uncontrolled seizures.

The historic procedure was carried out at Kigali University Teaching Hospital (CHUK), where doctors successfully operated on a patient who had suffered from epilepsy for more than 15 years. The development makes Rwanda and the wider Great Lakes Region newly capable of offering advanced surgical treatment for drug-resistant epilepsy.

The surgery was performed during a week-long Epilepsy Surgery Training Camp that began Monday, bringing together international specialists in neurosurgery, neurology and anesthesiology to work alongside Rwandan medical teams.

Health experts say the introduction of epilepsy surgery is a turning point for patients who previously had limited treatment options and were often advised to seek care abroad.

"For a long time, we could only manage epilepsy by adjusting medication, even when it was no longer effective," said Dr. Sylvie Inyange Musoni, a neurosurgeon at CHUK who was part of the surgical team. "Now we have a solution that can truly change patients' lives."

The first patient to undergo the procedure is a 39-year-old woman whose condition had worsened despite years of treatment with multiple medications. Doctors identified the left side of her brain as the source of the seizures and performed surgery to address it.

Epilepsy often places a heavy burden on patients and families, doctors say, affecting education, employment and quality of life while increasing medical costs and emotional strain.

"This condition impacts not only the patient, but the entire family and even the healthcare system," Musoni said. "Having this service available locally reduces that burden significantly."

Mukarugwiza Alvera, a caregiver to the first patient, said the family is grateful the surgery was made available in Rwanda.

"We tried many treatments and even feared we would be told to seek care abroad,

which we could not afford,” she said. “Having this service here feels like a blessing.”

Dr. Severien Muneza, head of neurosurgery at CHUK, said eight patients with drug-resistant epilepsy are scheduled to undergo surgery during the training camp. Each procedure takes between three and six hours.

He said medical evidence shows that more than 80% of patients experience significant improvement after surgery, with many able to reduce or stop medication entirely.

“This is a proud moment for Rwanda’s healthcare system,” Muneza said. “It demonstrates how building local expertise can transform lives.”