Vinmec Central Park Performs Vietnam's First Pediatric SEEG with AutoGuide Robot

HO CHI MINH CITY, VIETNAM, July 29, 2025 /EINPresswire.com/ -- A major breakthrough in Vietnam's neurological treatment was recently achieved as doctors at Vinmec Central Park International Hospital successfully performed surgery on a 9-year-old boy with drug-resistant epilepsy, utilizing the AutoGuide™ robotic Guidance system for SEEG implantation.

This marks the first time in Vietnam that robotic guidance has been used in pediatric epilepsy surgery,— a milestone that opens new possibilities for safer, less invasive, and highly precise treatment options for vulnerable patients. The case also highlights Vietnam's progress in approaching global standards in advanced epilepsy care.

A 5-Year Search for Seizure-Free Sleep

The patient, B.Q.K. (age 9, from Hanoi), began experiencing seizures in 2021. Despite various treatment regimens and adjustments both domestically and abroad, his condition failed to improve - sometimes experiencing dozens of seizures per day.

For nearly five years, his family sought treatment at numerous medical centers in the hope of giving their child a peaceful night's sleep without seizures.

According to the World Health Organization (WHO), approximately 30% of epilepsy patients are drug-resistant, meaning they do not respond to medication. For these patients, surgery resection of the epileptic zone is often the most effective option. However, accurately localizing the

epileptogenic zone - especially in children - is extremely challenging when scalp EEG, MRI, or PET scans provide inconclusive findings.

SEEG and AutoGuide: A Technological Duo to Precisely Locate the “Culprit” in the Brain

Following a thorough multidisciplinary evaluation, doctors at Vinmec Central Park decided to use AutoGuide™ robotic navigation system to perform stereo-electroencephalography (SEEG) to accurately identify the epileptic zone. The robotic guidance ensured high accuracy, faster operative time, and reduced trauma to the brain.

After seven days of SEEG monitoring, the epileptogenic zone was localized in the right orbitofrontal cortex and inferior frontal gyrus—areas densely packed with neural pathways and blood vessels. On June 17, 2025, the epileptic zone removal was performed by Dr. Truong Van Tri and his team at Vinmec Central Park, with technical support from Assoc. Prof. Dr. Shunsuke Nakae, an epilepsy specialist from Japan.

The surgery was successful, with no postoperative neurological deficits. After more than one month of recovery, the patient resumed normal activities and play, with only two minor nocturnal seizures recorded - a reduction of over 95% compared to preoperative frequency.

“For the first time, we achieved near-perfect outcome in pediatric epilepsy surgery thanks to AutoGuide™. This is a critical milestone, especially for young patients who are highly vulnerable to major brain surgery,” said Dr. Tri.

Vinmec: Advancing Neurology with Technology and International Integration

This successful case exemplifies Vinmec’s strategy to build centers of medical excellence through the integration of advanced technology, multidisciplinary expertise, and individualized treatment protocols. Vinmec has been ranked as the No.1 private hospital system in Vietnam for expatriates and international visitors, according to independent patient satisfaction surveys.

Vinmec Central Park is currently one of the few healthcare facilities in Vietnam, placing Vietnam among the few countries in Asia to master this technique—narrowing the gap with global neurology leaders.

About Vinmec Healthcare System

Vinmec is a nonprofit healthcare system founded by Vingroup, one of Vietnam’s largest private conglomerates. With 9 international hospitals and 4 international clinics nationwide, Vinmec is committed to delivering international-standard healthcare through subspecialized care, personalized treatment, and cutting-edge medical technology.

Vinmec Central Park in Ho Chi Minh City is the flagship hospital in the network and has been

widely recognized as the top private hospital in Vietnam for expatriates and international patients, serving tens of thousands annually.

The hospital excels across several specialties:
• Neurosurgery & Epilepsy: SEEG, robotic-guided surgery, brain tumor resection
• Oncology – Orthopedic Surgery – Cardiology – Advanced Obstetrics & Gynecology
• Allergy & Clinical Immunology: Vietnam's first and only center recognized as a Center of Excellence by the World Allergy Organization (WAO), in close partnership with Cleveland Clinic (USA) to develop precision medicine and chronic disease management programs
• 3D Medical Technology: Pioneer in 3D-printed titanium implants for complex orthopedic oncology reconstructions

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