Nicolet Cortical Stimulator

Functional brain mapping for brain tumor and epilepsy surgery



The new Nicolet Cortical Stimulator from CareFusion is a compact digital and portable unit that aids in indentification and mapping of the areas of the brain that control speech, sensory, vision and motor skills. The resulting map aides physicians and surgeons in planning their surgical approach and procedure.

In addition to providing direct, constant current stimulation to the brain, the Nicolet Cortical Stimulator interfaces with the Nicolet EEG (Electroencephalograph) system to provide additional features, including an audit of all stimulation parameters and locations stimulated.

Benefits/Features:

- Displays selected and actual current delivered
- Ictal Disrupt feature for management of "after discharges"
- Comprehensive, automated report for timely results
- User configurable frequency, duration and current levels
- Eliminates manual electrode switching
- Integrated software

200,000 new cases of epilepsy are diagnosed annually. The incidence is highest under the age of two and over the age of 65.1



A new standard of care

Innovative features of this new product include the visual display and annotations of the procedure results. The automated report provides procedure results to the medical record more efficiently. The enhanced functionality helps neurologists and neurosurgeons when performing brain mapping procedures either in the operating room during brain tumor resections or in epilepsy monitoring units as part of the epilepsy surgical workup.

This major advancement for CareFusion in the area of epilepsy monitoring and brain surgery helps eliminates errors in both crucial procedures. "We are incredibly excited about the major advancement offered by the Nicolet Cortical Stimulator," said R. Edward Hogan, MD, Medical Director of the Epilepsy Center at Washington University in St. Louis and Barnes-Jewish Hospital. "By integrating the latest innovations in EEG monitoring with cortical stimulation, more efficient testing reduces brain surgery time, and results in a less fatigued patient and a safer surgical procedure. The system allows efficient identification of functional brain regions, allowing safer planning for brain surgery."

The Nicolet Cortical Stimulator received 510(K) clearance for the intended use of performing direct cortical stimulation as a stand alone device or as interfaced with its Nicolet LTM system through use of the related cortical stimulation software. The device is available both in the U.S. and internationally as part of the Nicolet EEG product line.

The primary groups benefitting from this new technology are patients with brain tumors or epilepsy.

Visit carefusion.com for a full menu of neurodiagnostic and monitoring products.

1 Epilepsy Foundation. Retrieved on December 8, 2009 from http://www.epilepsyfoundation.org/about/statistics.cfm.

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CareFusion Middleton, WI







The Nicolet Cortical Stimulator offers:

- Special software features
- Dynamically updated data
- Automated reports

